Search notes

Baskar, P.
09/719601

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FILE 'REGISTRY' ENTERED AT 12:26:53 ON 16 DEC 2003
L44 1 S OXIDOREDUCTASE/CN

- key terms

FILE 'HCAPLUS' ENTERED AT 12:27:15 ON 16 DEC 2003
L51 2 SEA FILE=HCAPLUS ABB=ON PLU=ON HORP(S)HUMAN

L44 1 SEA FILE=REGISTRY ABB=ON PLU=ON OXIDOREDUCTASE/CN
L48 11542 SEA FILE=HCAPLUS ABB=ON PLU=ON L44 OR OXIDO REDUCTASE OR OXIDOREDUCTASE
L55 251 SEA FILE=HCAPLUS ABB=ON PLU=ON L48(2A)HUMAN
L56 31 SEA FILE=HCAPLUS ABB=ON PLU=ON L55(2A)PROTEIN

L57 32 L51 OR L56

L57 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:547948 HCAPLUS
DOCUMENT NUMBER: 139:80213
TITLE: Protein and cDNA sequences of 12.98-kilodalton **human** pterin-molybdenum **oxidoreductase**-like **protein** and their therapeutic uses
INVENTOR(S): Mao, Yumin; Xie, Yi
PATENT ASSIGNEE(S): Bode Gene Development Co., Ltd., Shanghai, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 32 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1360030	A	20020724	CN 2000-135109	20001220

PRIORITY APPLN. INFO.: CN 2000-135109 20001220

AB The invention provides protein and cDNA sequences of a novel 12.98-kilodalton human protein, designated as "pterin-molybdenum oxidoreductase 12.98", which has similar expression pattern to that of known pterin-molybdenum oxidoreductase. The invention relates to expression of pterin-molybdenum oxidoreductase-like protein in E. coli BL21(DE3)plySs transfected with plasmid pET-28(+). The invention also relates to preparation of antibody against pterin-molybdenum oxidoreductase-like protein. The invention further relates to the uses of the pterin-molybdenum oxidoreductase-like protein in treatment of pterin-molybdenum oxidoreductase-related diseases (such as neoplasm, blood disease, HIV infection, immune disease, inflammation, etc).

L57 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:377017 HCAPLUS
DOCUMENT NUMBER: 138:380494
TITLE: Human proteins, cDNA sequences encoding them, and uses thereof
INVENTOR(S): Kekuda, Ramesh; Patturajan, Meera; Zhong, Mei; Taupier, Raymond J., Jr.; Catterton, Elina; Li,

Li
PATENT ASSIGNEE(S): Curagen Corporation, USA
SOURCE: PCT Int. Appl., 184 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 9
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003040327	A2	20030515	WO 2002-US35473	20021105
WO 2003040327	A3	20031120		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
US 2001-333072P P 20011106
US 2001-348283P P 20011109
US 2001-332152P P 20011121
US 2001-334300P P 20011129
US 2002-287092 A2 20021104

AB The invention claims nucleic acid sequences that encode 21 polypeptides, referred to as NOVX nucleic acids and NOVX polypeptides. The proteins are members of the following protein families: vacuolar proton pump D subunit, myosin-binding protein C, RhoGEF domain-containing protein, keratin 8, RAS association domain family 3 protein, septin, mitochondrial import receptor subunit TOM40 homolog, melanoma-associated antigen (MAGE) D2, COTE1 protein, and NADH-ubiquinone oxidoreductase. The invention also provides sequences for the NOVX polypeptides and antibodies that immunospecifically bind to the polypeptide, as well as derivs., variants, mutants, or fragments of the NOVX polypeptide, polynucleotide, or antibody specific to the polypeptide. Vectors, host cells, antibodies and recombinant methods for producing the polypeptides and polynucleotides, as well as methods for using same are also included. The invention further discloses therapeutic, diagnostic and research methods for diagnosis, treatment, and prevention of disorders involving any one of these human nucleic acids and proteins. Examples of the invention describe GeneCalling, SeqCalling, and PathCalling technol. for identification of NOVX clones, quant. expression anal. of the clones in various cells and tissues, and identification of single nucleotide polymorphisms in NOVX nucleic acid sequences.

L57 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:335882 HCAPLUS
DOCUMENT NUMBER: 138:315892
TITLE: Protein and cDNA sequences of 14.63-kilodalton **human** pterin-molybdenum **oxidoreductase**-like **protein**

and their therapeutic uses
INVENTOR(S): Mao, Yumin; Xie, Yi
PATENT ASSIGNEE(S): Fudan Univ., Peop. Rep. China; Bodao Gene Technology Co., Ltd., Shanghai
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 31 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1355301	A	20020626	CN 2000-127553	20001124

PRIORITY APPLN. INFO.: CN 2000-127553 20001124

AB The invention provides protein and cDNA sequences of a novel 14.63-kilodalton human protein, designated as "pterin-molybdenum oxidoreductase 14.63", which has similar expression pattern to that of known pterin-molybdenum oxidoreductase. The invention relates to expression of pterin-molybdenum oxidoreductase-like protein in E. coli BL21(DE3)plySs transfected with plasmid pET-28(+). The invention also relates to preparation of antibody against pterin-molybdenum oxidoreductase-like protein. The invention further relates to the uses of the pterin-molybdenum oxidoreductase-like protein in treatment of pterin-molybdenum oxidoreductase-related diseases (such as neoplasm, blood disease, HIV infection, immune disease, inflammation, etc).

L57 ANSWER 4 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:302816 HCAPLUS
DOCUMENT NUMBER: 138:332909
TITLE: Protein and cDNA sequences of a 14.969-kilodalton **human** molybdopterin-containing **oxidoreductase** -like **protein** and their therapeutic uses
INVENTOR(S): Mao, Yumin; Xie, Yi
PATENT ASSIGNEE(S): Shanghai Bode Gene Development Co., Ltd., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 33 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1352256	A	20020605	CN 2000-127154	20001102

PRIORITY APPLN. INFO.: CN 2000-127154 20001102

AB The invention provides protein and cDNA sequences of a novel 14.969-kilodalton human protein, designated as "molybdopterin-containing oxidoreductase 14.969", which has similar expression pattern to that of known molybdopterin-containing oxidoreductase. The invention relates to expression of molybdopterin-containing oxidoreductase-like protein in E. coli BL21(DE3)plySs transfected with plasmid pET-28(+). The

invention also relates to preparation of antibody against molybdopterin-containing oxidoreductase-like protein. The invention further relates to the uses of the molybdopterin-containing oxidoreductase-like protein in treatment of molybdopterin-containing oxidoreductase-related diseases (such as neoplasm, blood disease, HIV infection, immune disease, and inflammation).

L57 ANSWER 5 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:779941 HCAPLUS
DOCUMENT NUMBER: 138:148687
TITLE: **Human** pterin molybdenum **oxidoreductase**-like **protein**, **protein** and cDNA sequences, recombinant production and therapeutic uses
INVENTOR(S): Mao, Yumin; Xie, Yi
PATENT ASSIGNEE(S): Bode Gene Development Co., Ltd., Shanghai, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 33 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1331303	A	20020116	CN 2000-116736	20000626

PRIORITY APPLN. INFO.: CN 2000-116736 20000626

AB The invention relates to a **human** pterin molybdenum **oxidoreductase**-like **protein**, designated as pterin molybdenum oxidoreductase 9. The open reading frame of the cDNA encodes a protein with 81 amino acids, and an estimated mol. weight of 9 kilodalton based on SDS-PAGE. The invention provides the use of polypeptide and polynucleotide in a method for treatment of various kinds of diseases, such as cancer, blood disease, HIV infection, immune diseases, and inflammation. The invention also relates to methods, expression vectors and host cells for recombinant production of said pterin molybdenum oxidoreductase 9. The invention also relates to agonist and antagonist of said pterin molybdenum oxidoreductase 9 and uses in therapy. The invention found that the expression profile of said pterin molybdenum oxidoreductase 9 in some animal cell lines and tissues was similar to that of human pterin molybdenum oxidoreductase.

L57 ANSWER 6 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:754569 HCAPLUS
DOCUMENT NUMBER: 137:274143
TITLE: Protein, gene and cDNA sequences of a novel human enzyme related to steroid oxidoreductase and their uses in drug screening
INVENTOR(S): Wei, Ming-Hui; Yan, Chunhua; Di Francesco, Valentina; Beasley, Ellen M.
PATENT ASSIGNEE(S): PE Corporation (NY), USA
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002077215	A1	20021003	WO 2001-US30452	20010928
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 6326180	B1	20011204	US 2001-816088	20010326
US 2002164733	A1	20021107	US 2001-956993	20010921
US 6613554	B2	20030902		

PRIORITY APPLN. INFO.: US 2001-816088 A 20010326
US 2001-956993 A 20010921

AB The invention provides protein, cDNA and genomic sequences for a novel human steroid oxidoreductase. The steroid oxidoreductase gene is expressed in human brain, kidney, colon and uterus. Four single nucleotide polymorphism has been found on steroid oxidoreductase gene mapped to chromosome 12. The invention also relates to screening modulator of steroid oxidoreductase and use them in therapy. The invention further relates to methods, vector and hosts for expression of steroid oxidoreductase.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 7 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:655343 HCAPLUS
DOCUMENT NUMBER: 137:164694
TITLE: Protein and cDNA sequences of a novel human pterin molybdenum oxidoreductase 12 and therapeutic use thereof
INVENTOR(S): Mao, Yumin; Xie, Yi
PATENT ASSIGNEE(S): Bode Gene Development Co., Ltd., Shanghai, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 32 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1324932	A	20011205	CN 2000-115762	20000519

PRIORITY APPLN. INFO.: CN 2000-115762 20000519

AB The invention provides protein and cDNA sequences of a novel human protein, designated as "pterin molybdenum oxidoreductase 12", which has similar gene expression pattern with known human pterin

molybdenum oxidoreductase. The invention relates to expression of pterin molybdenum oxidoreductase 12 in E.coli BL21(DE3)plySs transfected with plasmid pET-28(+). The invention also relates to preparation of antibody against pterin molybdenum oxidoreductase 12. The invention further relates to the uses of the pterin molybdenum oxidoreductase 12 fragment as probes in diagnosis, and in treatment of pterin molybdenum oxidoreductase 12-related diseases (such as malignant tumors, growth and development disorders, blood disease, immune disorder, HIV infection, or inflammation).

L57 ANSWER 8 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:487754 HCAPLUS
DOCUMENT NUMBER: 137:58657
TITLE: cDNA and **protein** sequences of **human oxidoreductase** sequence homologs and their uses
INVENTOR(S): Tribouley, Catherine M.; Lee, Ernestine A.; Yao, Monique G.; Elliott, Vicki S.; Yue, Henry
PATENT ASSIGNEE(S): Incyte Genomics, Inc., USA
SOURCE: PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002050284	A2	20020627	WO 2001-US49131	20011218
WO 2002050284	A3	20030417		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002031050	A5	20020701	AU 2002-31050	20011218
EP 1343900	A2	20030917	EP 2001-991316	20011218

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.:	US 2000-257802P	P	20001221
	US 2001-262901P	P	20010118
	WO 2001-US49131	W	20011218

AB The invention provides three human oxidoreductase sequence homologs (OXRD) and polynucleotides which identify and encode OXRD. The invention also provides expression vectors, host cells, antibodies, agonists, and antagonists. The invention also provides methods for diagnosing, treating, or preventing disorders associated with aberrant expression of OXRD.

L57 ANSWER 9 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:114712 HCAPLUS
DOCUMENT NUMBER: 136:338601

TITLE: Thioredoxin-mediated redox control of human T cell lymphotropic virus type I (HTLV-I) gene expression

AUTHOR(S): Sasada, Tetsuro; Nakamura, Hajime; Masutani, Hiroshi; Ueda, Shugo; Sono, Hiroshi; Takabayashi, Arimichi; Yodoi, Junji

CORPORATE SOURCE: Institute for Virus Research, Department of Biological Responses, Kyoto University, Shogoin, Sakyo-ku, Kyoto, 606-8507, Japan

SOURCE: Molecular Immunology (2002), 38(10), 723-732
CODEN: MOIMD5; ISSN: 0161-5890

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Thioredoxin (TRX) is a small ubiquitous protein with multiple biol. functions, including the thiol-mediated redox-regulation of gene expression. The authors have previously demonstrated that human TRX is overexpressed as a major **protein oxidoreductase** in **human** T cell lymphotropic virus type I (HTLV-I)-infected cells. In the present study, the authors investigated the relation between TRX and viral gene expression in HTLV-I infection. To study the mechanism that causes overexpression of TRX in HTLV-I-infected cells, the authors first examined the effect of the HTLV-I transactivator, Tax, on TRX expression. Induction of HTLV-I Tax protein increased the expression of TRX protein in a Tax-transfected Jurkat cell line, JPX-9. Moreover, chloramphenicol acetyltransferase (CAT) anal. with a reporter gene containing the TRX promoter revealed that Tax activates the transcription of TRX gene. To study the role of overexpressed TRX in HTLV-I infection, the authors next examined the effect of TRX on HTLV-I long terminal repeat (LTR)-mediated transcription using CAT anal. In an HTLV-I-infected human T cell line MT-2, the HTLV-I LTR transactivation was suppressed by the overexpression of wild-type TRX, but activated by the introduction of inactive mutant TRX. Moreover, in HTLV-I neg. Jurkat T cells, the HTLV-I LTR transactivation induced by Tax was also repressed by overexpression of wild-type TRX. Because cellular redox changes were shown to affect the HTLV-I gene expression, it is likely that TRX modulates the HTLV-I gene expression by regulating cellular redox state. Taken together, these findings suggest that overexpressed TRX, which is induced by HTLV-I Tax, may play an important role in HTLV-I infection through the neg. regulation of viral gene expression.

REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 10 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:926826 HCAPLUS

DOCUMENT NUMBER: 136:32744

TITLE: Human NADH-ubiquinone oxidoreductase 20kDa subunit sequence homolog and its cDNA and therapeutic use thereof

INVENTOR(S): Mao, Yumin; Xie, Yi

PATENT ASSIGNEE(S): Shengyuan Gene Development Co., Ltd. Shanghai, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 21 pp.
CODEN: CNXXEV

DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1302870	A	20010711	CN 1999-119947	19991102

PRIORITY APPLN. INFO.: CN 1999-119947 19991102

AB The invention provides cDNA sequences of a novel human NADH-ubiquinone oxidoreductase 20kDa subunit sequence homolog referred as BioNADH20 cloned from human embryonic brain. The invention also relates to constructing the cloned gene expression vectors to prepare its recombinant protein using E. coli cells or eukaryotic cells. Methods of expressing and preparing the above recombinant protein and its antibody are described. Methods of using related gene or protein products for the treatment of various kinds of diseases, such as cancer, blood diseases, HIV infection, immune diseases and inflammation are also disclosed. Methods for screening for related analogs, agonists, inhibitors and antagonists to be used as therapeutic drugs are also described.

L57 ANSWER 11 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:904454 HCAPLUS
DOCUMENT NUMBER: 136:32844
TITLE: Human NADH-ubiquinone oxidoreductase sequence homolog 21.89 and its cDNA and therapeutic use thereof
INVENTOR(S): Mao, Yumin; Xie, Yi
PATENT ASSIGNEE(S): Shanghai Biowindow Gene Development Inc., Peop. Rep. China
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001094537	A2	20011213	WO 2001-CN854	20010521
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CN 1324938	A	20011205	CN 2000-115843	20000524
AU 2001089496	A5	20011217	AU 2001-89496	20010521

PRIORITY APPLN. INFO.: CN 2000-115843 A 20000524
WO 2001-CN854 W 20010521

AB The invention provides cDNA sequences of a novel human NADH-ubiquinone oxidoreductase sequence homolog 21.89 (named after

protein MW detected on SDS-PAGE gel) cloned from human embryonic brain. The invention also relates to constructing the cloned gene expression vectors to prepare its recombinant protein using E. coli cells or eukaryotic cells. Methods of expressing and preparing the above recombinant protein and its antibody are described. Methods of using related gene or protein products for the treatment of various kinds of diseases, such as cancer, Down Syndrome, dementia, developmental disorders, immune diseases and inflammation are also disclosed. Methods for screening for related analogs, agonists, inhibitors and antagonists to be used as therapeutic drugs are also described.

L57 ANSWER 12 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:895849 HCAPLUS
DOCUMENT NUMBER: 136:80883
TITLE: cDNA and protein sequence of a novel human pterin-molybdenum containing oxidoreductase sequence homolog protein 11 and their uses in drug screening, diagnosis and therapeutics
INVENTOR(S): Mao, Yumin; Xie, Yi
PATENT ASSIGNEE(S): Fudan Univ., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 30 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1301865	A	20010704	CN 1999-127237	19991229

PRIORITY APPLN. INFO.: CN 1999-127237 19991229

AB This invention provides the cDNA and protein sequence of a novel human pterin-molybdenum containing oxidoreductase sequence homolog protein 11 cloned from fetal brain. The mol. weight of protein 11 is 11 kDa in SDS PAGE and the sequence of protein 11 has homol. with that of pterin-molybdenum containing oxidoreductase . The invention discloses the process of screening the agonist and antagonist against the polypeptide. The protein 11 can be used to diagnosis and treatment for many diseases e.g. cancer, blood disease, inflammation, immunol. disease and AIDS.

L57 ANSWER 13 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:747942 HCAPLUS
DOCUMENT NUMBER: 135:299548
TITLE: Human molybdopterin oxidoreductase 12 and its cDNA and therapeutic use thereof
INVENTOR(S): Mao, Yumin; Xie, Yi
PATENT ASSIGNEE(S): Shanghai Biowindow Gene Development Inc., Peop. Rep. China
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001075040	A2	20011011	WO 2001-CN426	20010326
WO 2001075040	A3	20020307		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CN 1315520	A	20011003	CN 2000-115149	20000327
AU 2001060015	A5	20011015	AU 2001-60015	20010326

PRIORITY APPLN. INFO.: CN 2000-115149 A 20000327
WO 2001-CN426 W 20010326

AB The invention provides cDNA sequences of a novel human molybdopterin oxidoreductase 12 (12 kDa) cloned from human embryonic brain. The invention also relates to constructing the cloned gene expression vectors to prepare its recombinant protein using E.coli cells or eukaryotic cells. Methods of expressing and preparing the above recombinant protein and its antibody are described. Methods of using related gene or protein products for the treatment of various kinds of diseases, such as cancer, blood diseases, HIV infection, immune diseases and inflammation are also disclosed. Methods for screening for related analogs, agonists, inhibitors and antagonists to be used as therapeutic drugs are also described.

L57 ANSWER 14 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:730781 HCAPLUS
DOCUMENT NUMBER: 135:268340
TITLE: Human molybdopterin oxidoreductase 10 and its cDNA and therapeutic use thereof
INVENTOR(S): Mao, Yumin; Xie, Yi
PATENT ASSIGNEE(S): Shanghai Biowindow Gene Development Inc., Peop. Rep. China
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001072788	A1	20011004	WO 2001-CN393	20010323

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,

TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CN 1315519 A 20011003 CN 2000-115110 20000324

PRIORITY APPLN. INFO.: CN 2000-115110 A 20000324

AB The invention provides cDNA sequences of a novel human molybdopterin oxidoreductase 10 (10 kDa) cloned from human embryonic brain. The invention also relates to constructing the cloned gene expression vectors to prepare its recombinant protein using E.coli cells or eukaryotic cells. Methods of expressing and preparing the above recombinant protein and its antibody are described. Methods of using related gene or protein products for the treatment of various kinds of diseases, such as cancer, blood diseases, HIV infection, immune diseases and inflammation are also disclosed. Methods for screening for related analogs, agonists, inhibitors and antagonists to be used as therapeutic drugs are also described.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 15 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:527300 HCAPLUS

DOCUMENT NUMBER: 136:227562

TITLE: Catalog of 434 single-nucleotide polymorphisms (SNPs) in genes of the alcohol dehydrogenase, glutathione S-transferase, and nicotinamide adenine dinucleotide, reduced (NADH) ubiquinone oxidoreductase families

AUTHOR(S): Iida, Aritoshi; Saito, Susumu; Sekine, Akihiro; Kitamoto, Takuya; Kitamura, Yuri; Mishima, Chihiro; Osawa, Saori; Kondo, Kimie; Harigae, Satoko; Nakamura, Yusuke

CORPORATE SOURCE: Laboratory for Genotyping, The SNP Research Center, Institute of Physical and Chemical Research (RIKEN), Tokyo, Japan

SOURCE: Journal of Human Genetics (2001), 46(7), 385-407
CODEN: JHGEFR; ISSN: 1434-5161

PUBLISHER: Springer-Verlag Tokyo

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An approach based on development of a large archive of single-nucleotide polymorphisms (SNPs) throughout the human genome is expected to facilitate large-scale studies to identify genes associated with drug efficacy and side effects, or susceptibility to common diseases. We have already described collections of SNPs present among various genes encoding drug-metabolizing enzymes. Here we report SNPs for such enzymes at addnl. loci, including 8 alc. dehydrogenases, 12 glutathione S-transferases, and 18 belonging to the NADH-ubiquinone oxidoreductase family. Among DNA samples from 48 Japanese volunteers, we identified a total of 434 SNPs at these 38 loci: 27 within coding elements, 52 in 5' flanking regions, five in 5' untranslated regions, 293 in introns, 20 in 3' untranslated regions, and 37 in 3' flanking regions. The ratio of transitions to transversions was approx. 2.1 to 1. Among the 27 coding SNPs, 13 were nonsynonymous changes that resulted in amino acid substitutions. Our collection of SNPs derived from this study should prove useful for investigations designed to detect assocns. between genetic variations and common diseases or responsiveness to drug therapy.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 16 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:174483 HCAPLUS
DOCUMENT NUMBER: 134:188980
TITLE: Protein and cDNA sequences for a human oxide-reductase protein hUCPA-OR and use thereof
INVENTOR(S): Li, Nenggan; Qian, Binzhi; Peng, Yongde; Chen, Zhu; Han, Zeguang
PATENT ASSIGNEE(S): Nanfang Research Center, National Human Gene Group, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 21 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1263947	A	20000823	CN 2000-111696	20000217

PRIORITY APPLN. INFO.: CN 2000-111696 20000217

AB The invention provides protein and cDNA sequences of a **human oxidoreductase protein** hUCPA-OR which is has sequence homol. with Escherichia coli counterpart. The invention also relates to constructing hUCPA-OR gene expression vectors to prepare recombinant hUCPA-OR using E. coli or eukaryotic cells. The invention further relates to the uses of hUCPA-OR gene and/or protein products. Methods of expressing and preparing recombinant hUCPA-OR and its antibody are described.

L57 ANSWER 17 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:15385 HCAPLUS
DOCUMENT NUMBER: 132:74554
TITLE: Protein and cDNA sequences encoding six **human oxidoreductase proteins**, and uses thereof in therapeutic and diagnostic applications
INVENTOR(S): Bandman, Olga; Hillman, Jennifer L.; Tang, Y. Tom; Lal, Preeti; Corley, Neil C.; Guegler, Karl J.; Gorgone, Gina A.; Baughn, Mariah R.
PATENT ASSIGNEE(S): Incyte Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000000622	A2	20000106	WO 1999-US14711	19990629
WO 2000000622	A3	20000420		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN,

IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD,
MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9948437	A1	20000117	AU 1999-48437	19990629
EP 1092032	A2	20010418	EP 1999-932044	19990629
R: BE, DE, ES, FR, GB, IT, NL				
JP 2002519034	T2	20020702	JP 2000-557375	19990629

PRIORITY APPLN. INFO.:

US 1998-91177P	P	19980630
US 1998-155241	A2	19980716
US 1998-91177	P	19980630
US 1998-155241P	P	19980716
WO 1999-US14711	W	19990629

AB The invention provides protein and cDNA sequences for six **human oxidoreductase proteins** (**HORPs**). **HORPs** were first identified in Incyte clones 321510, 634343, 1942326, 2395269, 008879, and 2274011 from **human** tissue cDNA libraries using a computer search for amino acid sequence alignments; consensus sequences were derived from overlapping and/or extended nucleic acid sequences. The invention also provides expression vectors, host cells, agonists, antibodies and antagonists. The invention also relates to the use of the provided proteins/genes in the diagnosis, treatment, and prevention of various disorders associated with HORP expression.

L57 ANSWER 18 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:784139 HCAPLUS
DOCUMENT NUMBER: 132:9666
TITLE: A human ubiquinone oxidoreductase subunit CI-AGGG homolog gene (CBFAKD10)
INVENTOR(S): Fu, Gang; Mao, Mao; Shen, Yu; Wu, Jisheng
PATENT ASSIGNEE(S): Shanghai Second Medical University, Peop. Rep. China
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9962950	A1	19991209	WO 1998-CN87	19980604
W: CN, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				

PRIORITY APPLN. INFO.:

WO 1998-CN87	19980604

AB CBFAKD10 polypeptides and polynucleotides and methods for producing such polypeptides by recombinant techniques are disclosed. The nucleotide sequence of CBFAKD10 is a cDNA sequence encoding a polypeptide 105 amino acids in length and with homol. to bovine ubiquinone oxidoreductase complex subunit CI-AGGG. Also disclosed are methods for utilizing CBFAKD10 polypeptides and polynucleotides in therapy for diseases such as AIDS, cancer, autoimmune disease, hepatitis, and diabetes. In a further aspect, the invention relates

to methods for identifying agonists and antagonists/inhibitors, and treating conditions associated with CBFAKD10 imbalance with the identified compds. In a still further aspect, the invention relates to diagnostic assays for treating diseases associated with inappropriate CBFAKD10 activity or levels.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 19 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:784138 HCAPLUS
DOCUMENT NUMBER: 132:9665
TITLE: A human ubiquinone oxidoreductase subunit CI-B17 homolog gene (CBLALE02)
INVENTOR(S): Xu, Shuhua; Fu, Gang; Ye, Min; Wu, Jisheng
PATENT ASSIGNEE(S): Shanghai Second Medical University, Peop. Rep. China
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9962949	A1	19991209	WO 1998-CN86	19980604

W: CN, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: WO 1998-CN86 19980604

AB CBLALE02 polypeptides and polynucleotides and methods for producing such polypeptides by recombinant techniques are disclosed. The nucleotide sequence of CBLALE02 is a cDNA sequence encoding a polypeptide 128 amino acids in length and with homol. to bovine ubiquinone oxidoreductase complex subunit CI-B17. Also disclosed are methods for utilizing CBLALE02 polypeptides and polynucleotides in therapy for diseases such as AIDS, cancer, autoimmune disease, hepatitis, and diabetes. In a further aspect, the invention relates to methods for identifying agonists and antagonists/inhibitors, and treating conditions associated with CBLALE02 imbalance with the identified compds. In a still further aspect, the invention relates to diagnostic assays for treating diseases associated with inappropriate CBLALE02 activity or levels.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 20 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:784137 HCAPLUS
DOCUMENT NUMBER: 132:9664
TITLE: A human ubiquinone oxidoreductase subunit CI-B22 homolog gene (CBNAFA09)
INVENTOR(S): Zhou, Juan; Yu, Yaping; Huang, Qiuhua; Mao, Mao
PATENT ASSIGNEE(S): Shanghai Second Medical University, Peop. Rep. China
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9962948	A1	19991209	WO 1998-CN85	19980604

W: CN, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: WO 1998-CN85 19980604

AB CBNAFA09 polypeptides and polynucleotides and methods for producing such polypeptides by recombinant techniques are disclosed. The nucleotide sequence of CBNAFA09 is a cDNA sequence encoding a polypeptide 179 amino acids in length and with homol. to bovine ubiquinone oxidoreductase complex subunit CI-B22. Also disclosed are methods for utilizing CBNAFA09 polypeptides and polynucleotides in therapy for diseases such as AIDS, cancer, autoimmune disease, hepatitis, and diabetes. In a further aspect, the invention relates to methods for identifying agonists and antagonists/inhibitors, and treating conditions associated with CBNAFA09 imbalance with the identified compds. In a still further aspect, the invention relates to diagnostic assays for treating diseases associated with inappropriate CBNAFA09 activity or levels.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 21 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:784136 HCAPLUS
DOCUMENT NUMBER: 132:9663
TITLE: A human ubiquinone oxidoreductase subunit CI-PDSW homolog gene (CBLAIC08)
INVENTOR(S): Shen, Yu; Ye, Min; Wu, Jisheng
PATENT ASSIGNEE(S): Shanghai Second Medical University, Peop. Rep. China
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9962947	A1	19991209	WO 1998-CN84	19980604

W: CN, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: WO 1998-CN84 19980604

AB CBLAIC08 polypeptides and polynucleotides and methods for producing such polypeptides by recombinant techniques are disclosed. The nucleotide sequence of CBLAIC08 is a cDNA sequence encoding a polypeptide 172 amino acids in length and with homol. to bovine ubiquinone oxidoreductase complex subunit CI-PDSW. Also disclosed are methods for utilizing CBLAIC08 polypeptides and polynucleotides in therapy for diseases such as AIDS, cancer, autoimmune disease,

hepatitis, and diabetes. In a further aspect, the invention relates to methods for identifying agonists and antagonists/inhibitors, and treating conditions associated with CBLAIC08 imbalance with the identified compds. In a still further aspect, the invention relates to diagnostic assays for treating diseases associated with inappropriate CBLAIC08 activity or levels.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 22 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:16948 HCAPLUS
DOCUMENT NUMBER: 130:206649
TITLE: cDNA of eight nuclear encoded subunits of NADH:ubiquinone oxidoreductase: human complex I cDNA characterization completed
AUTHOR(S): Loeffen, J. L. C. M.; Triepels, R. H.; Van Den Heuvel, L. P.; Schuelke, M.; Buskens, C. A. F.; Smeets, R. J. P.; Trijbels, J. M. F.; Smeitink, J. A. M.
CORPORATE SOURCE: Nijmegen Center for Mitochondrial Disorders, University Hospital Nijmegen, Nijmegen, 6500 HB, Neth.
SOURCE: Biochemical and Biophysical Research Communications (1998), 253(2), 415-422
CODEN: BBRCA9; ISSN: 0006-291X
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB NADH:ubiquinone oxidoreductase (complex I) is an extremely complicated multiprotein complex located in the inner mitochondrial membrane. Its main function is the transport of electrons from NADH to ubiquinone, which is accompanied by translocation of protons from the mitochondrial matrix to the inter-membrane space. Human complex I appears to consist of 41 subunits of which 34 are encoded by nuclear DNA. Here we report the cDNA sequences of the hitherto uncharacterized 8 nuclear encoded subunits, all located within the hydrophobic protein (HP) fraction of complex I. Now all currently known 41 **proteins** of **human** NADH:ubiquinone **oxidoreductase** have been characterized and reported in literature, which enables more complete mutational anal. studies of isolated complex I-deficient patients. (c) 1998 Academic Press.

REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 23 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:6128 HCAPLUS
DOCUMENT NUMBER: 130:178190
TITLE: A human succinate-ubiquinone oxidoreductase CII-3 subunit gene ending in a polymorphic dinucleotide repeat is located within the sulfonylurea receptor (SUR) gene
AUTHOR(S): Wohllk, Nelson; Thomas, Pamela M.; Huang, Eileen; Cote, Gilbert J.
CORPORATE SOURCE: Section of Endocrinology, The University of Texas M.D. Anderson Cancer Center, Houston, TX, 77030, USA

SOURCE: Molecular Genetics and Metabolism (1998), 65(3), 187-190
CODEN: MGMEFF; ISSN: 1096-7192
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors report the cloning of two variant genes encoding the CII-3 subunit of succinate-ubiquinone oxidoreductase complex II. One gene is located within intron 10 of the human sulfonylurea receptor gene. The 3' boundary of this gene ends in a polymorphic dinucleotide repeat. The second gene CII-3b is expressed at a low level and contains a 102-bp internal deletion compared to CII-3 cDNA. These genes should prove valuable in the characterization of Complex II disorders. (c) 1998 Academic Press.

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 24 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:612170 HCAPLUS
DOCUMENT NUMBER: 129:226639
TITLE: Cloning and cDNA sequences of human proteinase, oxidoreductase, and GTP-binding protein homologs
INVENTOR(S): Mueller, Christopher G.; Lebecque, Serge J. E.; Liu, Yong-jun; Dowling, Lynette M.; Huffine, Constance F.; Gorman, Daniel M.
PATENT ASSIGNEE(S): Schering Corporation, USA
SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9839421	A2	19980911	WO 1998-US3937	19980306
WO 9839421	A3	19990114		
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CZ, EE, GE, GW, HU, ID, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 6069229	A	20000530	US 1997-813150	19970307
AU 9866737	A1	19980922	AU 1998-66737	19980306
US 6518405	B1	20030211	US 2000-546553	20000410
US 2003149245	A1	20030807	US 2003-349806	20030122

PRIORITY APPLN. INFO.:
US 1997-813150 A 19970307
WO 1998-US3937 W 19980306
US 2000-546553 A3 20000410

AB Complementary DNA encoding various human proteins, reagents related thereto, including specific antibodies, and purified proteins are described. The BS10.55 gene was initially found by anal. of clones isolated from germinal center dendritic cells. The predicted amino acid sequences comprises 470 residues, including a signal peptide moiety, with the structural motifs of a member of the

disintegrin-metalloproteinase family of proteases. The YTF03 gene was also detected in dendritic cells, codes for 567 amino acid residues including a signal peptide, and is similar to monoamine oxidase-like enzymes. The APD08 gene was detected in dendritic cells, codes for a GTP-binding protein/GTPase-like protein comprising 619 amino acid residues. Methods of using said reagents and related diagnostic kits are also provided.

L57 ANSWER 25 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:726098 HCAPLUS
DOCUMENT NUMBER: 128:58027
TITLE: Cloning of the human cDNA sequence encoding the NADH:ubiquinone oxidoreductase MLRQ subunit
AUTHOR(S): Kim, Jae Wha; Lee, Younghee; Kang, Ho Bum; Choe, Yong Kyung; Chung, Tae Wha; Chang, Sung Yeoul; Lee, Kwang Soo; Choe, In Seong
CORPORATE SOURCE: Mol. and Cell. Biol. Res. Div., Korea Res. Inst. of Biosci. and Biotechnol., Taejon, 305-333, S. Korea
SOURCE: Biochemistry and Molecular Biology International (1997), 43(3), 669-675
CODEN: BMBIES; ISSN: 1039-9712
PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A cDNA clone encoding human NADH:ubiquinone oxidoreductase (complex I of mitochondrial respiratory chain) MLRQ subunit was isolated from human fetal liver cDNA library. The clone contained an open reading frame of 246 bp which predicted a protein comprising 81 amino acids with a calculated mol. weight of 9,370 Da. The deduced amino acid sequence exhibited 95% homol. (88% identity and 7% favored substitution) to that of bovine MLRQ subunit. Northern anal. revealed that the cDNA clone hybridized with a 0.7 kb mRNA species which was present in all tissues examined The expression level of the 0.7 kb mRNA in heart, skeletal muscle, and brain was higher than in other organs. Human MLRQ cDNA could cross-hybridize with the genomic DNAs from various species.
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 26 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:43712 HCAPLUS
DOCUMENT NUMBER: 126:140372
TITLE: A human cDNA encoding the homolog of NADH:ubiquinone oxidoreductase subunit B13
AUTHOR(S): Pata, Illar; Tensing, Kristiina; Metspalu, Andres
CORPORATE SOURCE: Tartu University, Institute of Molecular and Cell Biology, Estonian Biocentre, Tartu, Estonia
SOURCE: Biochimica et Biophysica Acta (1997), 1350(2), 115-118
CODEN: BBACAQ; ISSN: 0006-3002
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A cDNA encoding the human homolog of bovine NADH:ubiquinone oxidoreductase (complex I of mitochondrial respiratory chain)

subunit B13 has been isolated. The clone contains an open reading frame of 348 bp, 23 bp of 5'-untranslated sequence (UTR) and a long 3'UTR of 1088 bp. The deduced amino-acid sequence is 87 identical to bovine B13. Human B13 mRNA expression was observed in all tissues examined with highest levels in heart, skeletal muscle, and brain. Southern anal. of human genomic DNA revealed the presence of multigene family.

L57 ANSWER 27 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:72276 HCAPLUS
DOCUMENT NUMBER: 124:108025
TITLE: Relationship of human liver dihydrodiol dehydrogenases to hepatic bile-acid-binding **protein** and an **oxidoreductase** of **human** colon cells
AUTHOR(S): Hara, Akira; Matsuura, Kazuya; Tamada, Yoshiyuki; Sato, Kumiko; Miyabe, Yoshiyuki; Deyashiki, Yoshihiro; Ishida, Naoko
CORPORATE SOURCE: Biochem. Lab., Gifu Pharm. Univ., Gifu, 502, Japan
SOURCE: Biochemical Journal (1996), 313(2), 373-6
CODEN: BIJOAK; ISSN: 0264-6021
PUBLISHER: Portland Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We previously isolated three monomeric dihydrodiol dehydrogenases, DD1, DD2 and DD4, from human liver, and cloned a cDNA (C9) thought to encode DD2, which is identical with those for human bile-acid-binding **protein** and an **oxidoreductase** of **human** colon carcinoma HT29 cells. In the present study we have provided evidence that the C9 cDNA clone encodes DD1, not DD2. A recombinant enzyme expressed from the cDNA in a bacterial system was purified, and its catalytic properties, bile-acid-binding ability and primary sequence were compared with those of the hepatic dihydrodiol dehydrogenases. The results show that DD1 encoded by C9 possesses prostaglandin F synthase activity but low affinity for lithocholic acid, whereas DD2, showing differences of six amino acid residues from the DD1 sequence, exhibited high-affinity binding for the bile acid. Refined relationship between dihydrodiol dehydrogenases and their related proteins of human tissues is proposed.

L57 ANSWER 28 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:607228 HCAPLUS
DOCUMENT NUMBER: 113:207228
TITLE: Detection and isolation of the NADPH-binding protein of the NADPH:O2 oxidoreductase complex of human neutrophils
AUTHOR(S): Green, Terrence R.; Pratt, Katherine L.
CORPORATE SOURCE: Dep. Biochem. Mol. Biol., Oregon Health Sci. Univ., Portland, OR, 97201, USA
SOURCE: Journal of Biological Chemistry (1990), 265(31), 19324-9
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Neutrophils assayed with nitro blue tetrazolium (NBT) exhibit intracellular rather than extracellular superoxide-generating

activity when stimulated with phorbol myristate acetate. Enzyme activity is stimulated by anionic detergents, reversibly inhibited by 2',3'-NADPH dialdehyde, and present in equal levels in membrane fractions obtained from phorbol myristate acetate-stimulated and resting cell suspensions. Solubilized membrane shows enzyme activity co-eluting on mol. sieving columns with the cytochrome b redox component of the oxidoreductase complex. Enzyme activity was resolved free of the cytochrome b component following passage of solubilized membrane exts. through QAE-Sephadex anion exchange columns. Enzyme activity measured by the NBT assay appears to be that associated with the NADPH binding protein of the oxidoreductase complex. When exposed to NBT and NADPH this component of the oxidoreductase generate superoxide independent of cytochrome b.

L57 ANSWER 29 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1985:612181 HCAPLUS
DOCUMENT NUMBER: 103:212181
TITLE: The thiol-**protein** sulfide **oxidoreductase** in **human** mononuclear cells of blood and bone marrow
AUTHOR(S): Ansorge, Siegfried; Mansfeld, Hans Werner; Held, Christa; Broodtaerts, Linda; Van Kamp, Ben
CORPORATE SOURCE: Klin. Inn. Med., Med. Akad., Magdeburg, DDR-3090, Ger. Dem. Rep.
SOURCE: Acta Histochemica (1986), 78(1), 65-71
CODEN: AHISA9; ISSN: 0065-1281
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The in vivo function of the thiol-protein disulfide oxidoreductase (TPO) in the biosynthesis of Ig was investigated by studying the enzyme content in human lymphoid and other cells by an immunocytochem. method. In contrast to peripheral blood B lymphocytes which showed no demonstrable TPO, normal as well as malignant bone marrow plasma cells (all Ig classes) contained abundant amts. of TPO. TPO-containing plasma cells were identified by double-staining techniques, suggesting that TPO is involved in the terminal step of B cell differentiation and Ig biosynthesis. Besides plasma cells, .apprx.10% of mononuclear marrow cells as yet unidentified medium-sized and large cells, exhibited strong anti-TPO reactivity. Furthermore, using surface-cytoplasmic double staining methods, monocytes from human peripheral blood could be identified as representing the only cytoplasmic TPO-containing normal mononuclear blood cells.

L57 ANSWER 30 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1983:158485 HCAPLUS
DOCUMENT NUMBER: 98:158485
TITLE: Identification of thiol:protein disulfide oxidoreductase activity in cultured human fibroblasts: dependence of enzyme activity on growth conditions
AUTHOR(S): Morin, John E.; Dixon, Jack E.; Chang, Patrick P.; Moss, Joel
CORPORATE SOURCE: Dep. Biochem., Purdue Univ., West Lafayette, IN, 47907, USA
SOURCE: Biochemical and Biophysical Research Communications (1983), 111(3), 872-7
CODEN: BBRCA9; ISSN: 0006-291X

DOCUMENT TYPE: Journal
LANGUAGE: English
AB Thiol:protein disulfide oxidoreductase (I) activity was assayed in exts. of cultured normal human skin fibroblasts. I activity in confluent fibroblasts was dependent on growth conditions. In serum-deprived fibroblasts grown in minimal medium, I activity was .apprx.40% of that observed in fibroblasts maintained in medium supplemented with 10% fetal calf serum. In fibroblasts cultured in medium supplemented only with insulin, activity was 35% greater than that in fibroblasts cultured in unsupplemented defined medium. Antibodies raised against purified bovine liver I immunopptd. all of the activity present in fibroblast exts. The I from human fibroblasts thus appears to share antigenic determinants with the bovine liver enzyme. The human fibroblast may serve as an in vitro model to study the regulation of I.

L57 ANSWER 31 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1975:136593 HCAPLUS
DOCUMENT NUMBER: 82:136593
TITLE: Probable assignment of the locus determining human red cell acid phosphatase ACP1 to chromosome 2 using somatic cell hybrids
AUTHOR(S): Povey, Susan; Swallow, Dallas M.; Bobrow, Martin; Craig, Ian; Van Heyningen, Veronica
CORPORATE SOURCE: Galton Lab., Univ. Coll. London, London, UK
SOURCE: Annals of Human Genetics (1974), 38, Pt. 1, 1-5
CODEN: ANHGAA; ISSN: 0003-4800
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The loci determining **human** erythrocyte acid phosphatase (I), NAD-dependent soluble malate dehydrogenase (II), and NADP-dependent soluble isocitrate dehydrogenase (III) were examined in 12 independent interspecific hybrid lines from 6 different crosses (one from a **human**-Chinese hamster hybrid and the others from **human**-mouse hybrids), together with 9 subclones from the hybrid **HORP**, which possessed the 3 enzymes. The hybrids were also tested for a total of 27 other human enzymes. With one exception the data were consistent with the synteny of the I, II, and III loci. Detailed chromosome anal. of the subclones confirmed the assignment of these loci to chromosome 2. In the remaining hybrid chromosome 2 was present, together with II and III but I was not present. Possible explanations for this discrepancy are discussed.

L57 ANSWER 32 OF 32 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1972:445975 HCAPLUS
DOCUMENT NUMBER: 77:45975
TITLE: Thiol-**protein** disulfide **oxidoreductase** activity in **human** placental tissue homogenates
AUTHOR(S): Branda, Luis A.; Ferrier, Barbara M.; Celhoffer, Lynne
CORPORATE SOURCE: Dep. Biochem., McMaster Univ., Hamilton, ON, Can.
SOURCE: Canadian Journal of Biochemistry (1972), 50(5), 507-9
CODEN: CJBIAE; ISSN: 0008-4018
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Thiol-protein disulfide oxidoreductase activity was detected in the soluble cell fraction of human placental tissue homogenized in sucrose. This activity was demonstrated in the rapid reduction of oxytocin and the somewhat less rapid reduction of insulin by reduced glutathione. The apparent pH optimum of the enzymic activity for the reduction of oxytocin and insulin was .apprx.pH 8.

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 12:29:50 ON 16 DEC 2003

L44 1 SEA FILE=REGISTRY ABB=ON PLU=ON OXIDOREDUCTASE/CN
L48 11542 SEA FILE=HCAPLUS ABB=ON PLU=ON L44 OR OXIDO REDUCTASE OR OXIDOREDUCTASE
L49 306 SEA FILE=HCAPLUS ABB=ON PLU=ON L48(3A)HUMAN
L50 48 SEA FILE=HCAPLUS ABB=ON PLU=ON L49(3A)PROTEIN
L51 2 SEA FILE=HCAPLUS ABB=ON PLU=ON HORP(S)HUMAN
L52 49 SEA FILE=HCAPLUS ABB=ON PLU=ON L50 OR L51
L53 46 SEA L52
L54 24 DUP REM L53 (22 DUPLICATES REMOVED)

L54 ANSWER 1 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-547772 [58] WPIDS
DOC. NO. CPI: C2002-155349
TITLE: New isolated Aspergillus ochraceus 11 alpha-hydroxylase or oxidoreductase, for bioconversion of steroid substances to their 11 alpha hydroxy counterparts in heterologous cells.
DERWENT CLASS: B04 D16
INVENTOR(S): CLAYTON, R A; EASTON, A M; ENGEL, L C; MESSING, D M; NG, J S; REITZ, B; SUZANNE, B L; WALKER, M C; WANG, P T; BOLTON, S; CLAYTON, R; EASTON, A; ENGEL, L; MESSING, D
PATENT ASSIGNEE(S): (BOLT-I) BOLTON S; (CLAY-I) CLAYTON R; (EAST-I) EASTON A; (ENGE-I) ENGEL L; (MESS-I) MESSING D; (PHAA) PHARMACIA CORP; (CLAY-I) CLAYTON R A; (EAST-I) EASTON A M; (ENGE-I) ENGEL L C; (MESS-I) MESSING D M; (NGJS-I) NG J S; (REIT-I) REITZ B; (SUZA-I) SUZANNE B L; (WALK-I) WALKER M C; (WANG-I) WANG P T
COUNTRY COUNT: 98
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002046386	A2	20020613	(200258)*	EN	181
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2002041768	A	20020618	(200262)		
US 2003148420	A1	20030807	(200358)		
EP 1352054	A2	20031015	(200368)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
WO 2002046386	A2		WO 2001-US51070	20011026
AU 2002041768	A		AU 2002-41768	20011026
US 2003148420	A1	Provisional	US 2000-244300P	20001030
			US 2001-21425	20011030
EP 1352054	A2		EP 2001-988464	20011026
			WO 2001-US51070	20011026

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2002041768	A	Based on	WO 2002046386
EP 1352054	A2	Based on	WO 2002046386

PRIORITY APPLN. INFO: US 2000-244300P 20001030; US 2001-21425 20011030

AN 2002-547772 [58] WPIDS

AB WO 200246386 A UPAB: 20020910

NOVELTY - An isolated protein or its variant (I) having an:

Aspergillus ochraceus (Ao) 11 alpha -hydroxylase sequence of 514 amino acids (S2), given in specification; or

(i) Ao oxidoreductase sequence of 695 amino acids (S6), given in specification, is new.

DETAILED DESCRIPTION - A new isolated protein (I) of S2 or S6, where the Ao 11 alpha -hydroxylase can catalyze the 11 alpha hydroxylation of:

(i) 3 keto delta 4,5 steroids (3 keto delta 4 steroids);

(ii) 3 keto delta 4,5 delta 6,7 steroids (3 keto delta 4 delta 6 steroids);

(iii) 3 keto delta 6,7 steroids (3 keto delta 6 steroids); or

(iv) 3 keto delta 1, 2 delta 4, 5 steroids (3 keto delta 1 delta 4 steroids).

INDEPENDENT CLAIMS are also included for the following:

(1) a nucleic acid (II), DNA, cDNA, gene or allele of the gene encoding Ao 11 alpha -hydroxylase or Ao oxidoreductase, where the nucleic acid encoding 11 alpha -hydroxylase, has a sequence of 1776 base pairs (bp; S1), given in specification, and the nucleic acid encoding oxidoreductase has a sequence of 2322 bp, given in specification;

(2) a fusion protein comprising Ao 11 alpha -hydroxylase or Ao oxidoreductase;

(3) a polypeptide, comprising S2 or S6 with a conservative amino acid substitution;

(4) a polypeptide comprising 50 % (preferably 99 %) identity to S2 or S6;

(5) expressing (I) having 11 alpha -hydroxylase activity;

(6) an expression cassette comprising (II) ;

(7) an expression cassette (III) comprising a DNA encoding an enzyme from the metabolic pathway for the synthesis of sitosterol to eplerenone, and that catalyzes a conversion (hydroxylation reaction) of:

(a) canrenone to 11 alpha -hydroxy canrenone;

(b) androstenedione to 11 alpha -hydroxy androstenedione;

(c) aldona to 11 alpha -hydroxy androstenedione;

(d) ADD (1,4 androstenedienedione) to 11 alpha -hydroxy ADD;
(e) mexrenone to 11 alpha -hydroxy mexrenone;
(f) 6 beta mexrenone to 11 alpha -hydroxy 6 beta mexrenone;
(g) 9 alpha mexrenone to 11 alpha -hydroxy 9 alpha mexrenone;
(h) 12 beta mexrenone to 11 alpha -hydroxy 12 beta mexrenone;
(i) delta 12 mexrenone to 11 alpha -hydroxy delta 12 mexrenone;
(j) testosterone to 11 alpha -hydroxy testosterone;
(k) progesterone to 11 alpha -hydroxy progesterone;
(l) mexrenone 6,7-bis-lactone to 11 alpha -hydroxy mexrenone 6,7-bis-lactone; or
(m) mexrenone 7,9-bislactone to 11 alpha -hydroxy mexrenone 7,9-bislactone;
(8) a recombinant host cell (IV) comprising (III);
(9) selective hydroxylation of a compound to an hydroxylated product in vitro, by:
(a) incubating the compound to be hydroxylated in the presence of the enzymes produced by selective oxidation of a compound to an hydroxylated product using (IV); and
(b) recovering the hydroxylated product;
(10) a host cell harboring 1 of the expression cassettes;
(11) determining cloned 11 alpha -hydroxylase activity by:
(a) transforming cells with a vector comprising a nucleic acid encoding the 11 alpha -hydroxylase,
(b) expressing the 11 alpha -hydroxylase;
(c) preparing subcellular membrane fractions from the cell;
(d) incubating the fraction microsomes with a steroid substrate; and
(e) monitoring conversion of the steroid substrate to its 11 alpha -hydroxy steroid counterpart;
(12) a protein of S2 or 95 % identical to S2;
(13) an 11 alpha -hydroxy peptide of S23 - S25;
(14) an immunogenic polypeptide comprising 10 consecutive residues of S2 or S6;
(15) an antibody specific for 11 alpha -hydroxylase having S2 or S6;
(16) an oxidoreductase peptide of S26;
(17) (15) Conjugated to an immunoaffinity matrix;
(18) detecting (M1) 11 alpha -hydroxylase and oxidoreductase in a biological fluid by contacting the fluid with a polypeptide specific for the enzyme:
(19) producing nucleic acid by hybridizing S1 or S5 to genomic DNA and isolating the nucleic acid detected;
(20) DNA prepared by (19);
(21) nucleic acid that hybridizes under high stringent conditions to the complement of S1 or S5;
(22) a DNA construct that alters the expression of a steroid 11 alpha -hydroxylase gene not normally expressed in a cell when the construct is inserted into chromosomal DNA of the cell, the construct having:
(a) a targeting sequence;
(b) a regulatory sequence; and
(c) the structural gene for a steroid 11 alpha -hydroxylase;
(23) a host cell harboring (22);
(24) use of a host cell harboring a cloned 11 alpha -hydroxylase for manufacturing a medicament for treating heart disease, inflammation, arthritis, or cancer; and
(25) a composition (C) having 0.5 - 500 g/L molasses, 0.5 - 50 g/L cornsteep liquid, 0.5 - 50 g/L KH_2PO_4, 2.5 - 250 g/L NaCl, 2.5 -

250 g/L glucose and 0.04 - 4 g/L progesterone, pH 3.5 - 7.

Ala-Ala-Ala-Tyr-Trp-Leu-Ala-Thr-Leu-Gln-Pro-Ser-Asp-Leu-Pro-Glu-Leu-Asn (S23)

Cys-Arg-Gln-Ile-Leu-Thr-Pro-Tyr-Ile-His-Lys-Arg-Lys-Leu-Ser-Lys-Gly-Thr-Thr-Asp (S24)

His-Met-Gly-Phe-Gly-His-Gly-Val-His-Ala-Cys-Pro-Gly-Arg-Phe-Phe-Ala-Ser-Asn-Glu-Ile (S25)

Cys-Thr-Tyr-Trp-Ala-Val-Ala-Lys-Asp-Asp-Pro-Tyr-Ala-Ser-Gly-Pro-Ala-Met-Asn-Gly (S26)

ACTIVITY - Antiinflammatory; Antiarthritic; Cytostatic; Cardiant. No biological data is given.

MECHANISM OF ACTION - Bioconversion of steroid substances to their 11 alpha -hydroxy counterparts mediator; Cell therapy.

USE - A host cell (IV) is useful for making one or more enzymes from the metabolic pathway for the synthesis of sitosterol to eplerenone which involves incubating (IV) in a nutrient medium under conditions, where the one or more enzymes encoded by the heterologous DNA are expressed and accumulated. (IV) is also useful for the selective oxidation of a compound to an hydroxylated product, which involves:

(a) incubating the compound to be hydroxylated in the presence of (IV) where the compound is hydroxylated and the hydroxylated product accumulates, and

(b) recovering the hydroxylated product.

An immunoaffinity matrix (preferably SEPHAROSE 4B (RTM) comprising any one of the antibodies as described above is useful for purifying a polypeptide from a biological fluid or cell lysate. A composition (C) is useful for producing spores from A. ochraceus, A. niger, A. nidulans, Rhizopus oryzae, R. stolonifer, Trichothecium roseum, Fusarium oxysporum, Rhizopus arrhizus, and Monosporium olivaceum, etc, preferably to produce spores from Ao (all claimed). (I) having 11 alpha -hydroxylase activity is useful in bioconversion of steroid substances to their 11 alpha -hydroxy counterparts. Dwg.0/16

L54 ANSWER 2 OF 24 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: 2002110091 MEDLINE
DOCUMENT NUMBER: 21831031 PubMed ID: 11841832
TITLE: Thioredoxin-mediated redox control of human T cell lymphotropic virus type I (HTLV-I) gene expression.
AUTHOR: Sasada Tetsuro; Nakamura Hajime; Masutani Hiroshi; Ueda Shugo; Sono Hiroshi; Takabayashi Arimichi; Yodoi Junji
CORPORATE SOURCE: Department of Biological Responses, Institute for Virus Research, Kyoto University, 53 Kawahara-cho, Shogoin, Sakyo-ku, 606-8507, Kyoto, Japan.
SOURCE: MOLECULAR IMMUNOLOGY, (2002 Feb) 38 (10) 723-32. Journal code: 7905289. ISSN: 0161-5890.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200204
ENTRY DATE: Entered STN: 20020214
Last Updated on STN: 20020410
Entered Medline: 20020409

AB Thioredoxin (TRX) is a small ubiquitous protein with multiple biological functions, including the thiol-mediated redox-regulation

of gene expression. We have previously demonstrated that human TRX is overexpressed as a major **protein oxidoreductase** in **human** T cell lymphotropic virus type I (HTLV-I)-infected cells. In the present study, we investigated the relationship between TRX and viral gene expression in HTLV-I infection. To study the mechanism that causes overexpression of TRX in HTLV-I-infected cells, we first examined the effect of the HTLV-I transactivator, Tax, on TRX expression. Induction of HTLV-I Tax protein increased the expression of TRX protein in a Tax-transfected Jurkat cell line, JPX-9. Moreover, chloramphenicol acetyltransferase (CAT) analysis with a reporter gene containing the TRX promoter revealed that Tax activates the transcription of TRX gene. To study the role of overexpressed TRX in HTLV-I infection, we next examined the effect of TRX on HTLV-I long terminal repeat (LTR)-mediated transcription using CAT analysis. In an HTLV-I-infected human T cell line MT-2, the HTLV-I LTR transactivation was suppressed by the overexpression of wild-type TRX, but activated by the introduction of inactive mutant TRX. Moreover, in HTLV-I negative Jurkat T cells, the HTLV-I LTR transactivation induced by Tax was also repressed by overexpression of wild-type TRX. Because cellular redox changes were shown to affect the HTLV-I gene expression, it is likely that TRX modulates the HTLV-I gene expression by regulating cellular redox state. Taken together, these findings suggest that overexpressed TRX, which is induced by HTLV-I Tax, may play an important role in HTLV-I infection through the negative regulation of viral gene expression.

L54 ANSWER 3 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-041498 [05] WPIDS
DOC. NO. NON-CPI: N2002-030769
DOC. NO. CPI: C2002-011838
TITLE: New **human oxidoreductase** **protein** and polynucleotides for identifying modulators of the protein useful for diagnosing and treating disorders such as tumor angiogenesis, Alzheimer's disease, cancer, dementia.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): MEYERS, R; WILLIAMSON, M
PATENT ASSIGNEE(S): (MILL-N) MILLENNIUM PHARM INC
COUNTRY COUNT: 96
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001083762	A2	20011108	(200205)*	EN	101
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001055769	A	20011112	(200222)		
EP 1280916	A2	20030205	(200310)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
US 2003113790	A1	20030619	(200341)		

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
WO 2001083762	A2		WO 2001-US13821	20010427
AU 2001055769	A		AU 2001-55769	20010427
EP 1280916	A2		EP 2001-928969	20010427
			WO 2001-US13821	20010427
US 2003113790	A1	Provisional	US 2000-200688P	20000428
		Cont of	US 2001-845044	20010427
			US 2003-336153	20030103

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2001055769	A	Based on	WO 2001083762
EP 1280916	A2	Based on	WO 2001083762

PRIORITY APPLN. INFO: US 2000-200688P 20000428; US 2001-845044 20010427; US 2003-336153 20030103

AN 2002-041498 [05] WPIDS

AB WO 200183762 A UPAB: 20030919

NOVELTY - An isolated **human oxidoreductase protein** (OP) (I), comprising a sequence 90% identical to a sequence (S1) of 594 amino acids (aa) given in specification, a fragment of 15 contiguous amino acids of (S1), naturally occurring allelic variant of (S1) or aa sequence encoded by a sequence 90% identical to a sequence (S2) of 2343 bp as given in the specification, or coding region of (I) in (S2), is new.

DETAILED DESCRIPTION - (I) is chosen from a biologically active polypeptide encoded by a nucleic acid (NA) molecule comprising a nucleotide sequence which is 90% identical to a sequence (S2), a naturally occurring allelic variant of (S1) encoded by a NA molecule which hybridizes to NA molecule comprising the complement of (S2) under stringent conditions, a fragment of 15 contiguous aa of (S1) and a polypeptide having 60% sequence identity with (S1).

INDEPENDENT CLAIMS are also included for the following:

(1) an isolated NA molecule (IIa) or its complement comprising a nucleotide sequence which is 90% identical to (S2); a fragment of 15 nucleotides of (S2); encoding (I), its fragment of 15 contiguous amino acids, or a naturally occurring allelic variant of (I);

(2) an isolated polynucleotide (IIb) which hybridizes to (II) under stringent conditions;

(3) an isolated polynucleotide (IIc) comprising a sequence complementary to (II);

(4) a vector (III) comprising (II);

(5) a host cell (III) transfected with (III);

(6) preparation of (I);

(7) an antibody (Ab) specific to (I);

(8) detecting (M1) the presence of (I) in a sample, by contacting the sample with a compound that binds to (I) and determining whether the compound binds to (I) in the sample;

(9) detecting (M2) the presence of (II) in a sample, by contacting the sample with a nucleic acid probe or primer which selectively binds to (II) and determining whether the probe or primer binds to (II) in the sample;

(10) a kit comprising a compound which selectively binds to (I)

or which hybridizes to (II) or a compound which selectively hybridizes to (II), and instructions for use;

(11) modulating (M3) the activity of (I), by contacting (I) or cell expressing (I) with a compound which binds to (I) to modulate the activity of (I);

(12) identifying (M4) a compound capable of treating a cellular proliferation, growth, apoptosis, differentiation, and/or migration disorder by aberrant (II) or (I) activity comprising assaying the ability of the compound to modulate (II) or (I) activity; and

(13) treating (M5) a subject having a cellular proliferation, growth, apoptosis, differentiation, and/or migration disorder by aberrant (II) or (I) expression comprising administering to the subject an OP modulator.

ACTIVITY - Cytostatic; Nootropic; Neuroprotective; Antiparkinsonian; Anticonvulsant. No supporting data is given.

MECHANISM OF ACTION - Gene therapy; Modulator of (I) or (II). No supporting data is given.

USE - (I) is useful for identifying a compound which modulates the activity of (I). The method comprises contacting (I) or cell expressing (I) with a test compound and determining whether (I) bind to the test compound or determining the effect of the compound on the activity or expression of (I), where the binding of the test compound to (I) is determined by detecting binding by direct detection of a test compound/polypeptide binding, detection of binding by using a competition binding assay or an assay for OP activity (claimed), where the identified compound (modulator) of (I) is useful in treatment and diagnosis of OP-mediated disorders, which include cancer, e.g. colon cancer, lung cancer, brain cancer, as well as other types of carcinomas, sarcomas, lymphomas, and/or leukemias; tumor angiogenesis and metastasis; skeletal dysplasia; hepatic disorders; and hematopoietic and/or myeloproliferative disorders. Stroke-associated cell-death and neurodegenerative disorders such as Alzheimer's disease, dementias related to Alzheimer's disease, Parkinson's and other Lewy diffuse body diseases, senile dementia and Huntington's disease. (M1) is useful for detecting the presence of (I) in a sample; and (M2) is useful for detecting the presence of (II) in the sample. Both the methods are useful for identifying a subject having a cellular proliferation, growth, apoptosis, differentiation and/or migration disorder, or at risk for developing the disorder, where the probe comprises at least 25 contiguous nucleotides of (S2) and the primers which includes a first primer comprising at least 25 contiguous nucleotides of (S2) and second amplification primer comprising 25 contiguous nucleotides from compliment of (S2) (all claimed). (M4) is useful for identifying a compound capable of treating a cellular proliferation, growth, apoptosis, differentiation, and/or migration disorder by aberrant (II) or (I) activity; and (M5) is useful for treating on the disorder (all claimed). (I) and (II) are useful as reagents or targets in OP protein assays applicable to (I) is useful for the treatment of disorders by the aberrant of abnormal regulation of the levels of choline, betaine, homocysteine and/or methionine in a subject. (I), (II) or Ab is used in screening assays, predictive medicine (e.g., diagnostic assays, prognostic assays, monitoring clinical trials, and pharmacogenetics), treatment (e.g. diagnostic assays, prognostic assays, monitoring clinical trials, and pharmacogenetics); and methods of treatment (e.g. therapeutic and prophylactic). OP protein has the ability to bind an OP ligand or substrate (e.g. choline and/or an acceptor molecule to

be reduced or oxidized); the ability to modulate metabolism of an OP ligand or substrate (e.g. metabolism of choline into betaine or homocysteine into methionine and/or metabolism of other metabolites to be reduced or metabolites to be oxidized); the ability to modulate an oxidoreductase-associated signaling mechanism; the ability to modulate cellular proliferation, apoptosis, or migration; and/or the ability to modulate cellular proliferation, growth, apoptosis, differentiation, and/or migration disorders. Fragments of (II) are also useful to synthesize antisense molecules of desired length and sequences. (II) is also useful to detect mutations in genes and gene expression products such as mRNA, as antisense constructs to control gene expression and for chromosome identification. (III) is useful for producing proteins and polypeptides, for conducting cell-based assays involving the protein or fragments and to produce non-human transgenic animals which are useful for studying the function of a receptor protein and identifying and evaluating modulators of the protein activity.
Dwg.0/4

L54 ANSWER 4 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-390245 [41] WPIDS
DOC. NO. CPI: C2001-118897
TITLE: Novel **human oxidoreductase protein** (ORP) useful for diagnosing, treating and preventing cell proliferative, neurological, viral, reproductive and autoimmune/inflammatory disorders associated with abnormal expression of ORP.
DERWENT CLASS: B04 D16
INVENTOR(S): AZIMZAI, Y; BAUGHN, M R; HILLMAN, J L; LAL, P; LU, D A M; TANG, Y T; YUE, H
PATENT ASSIGNEE(S): (INCY-N) INCYTE GENOMICS INC; (AZIM-I) AZIMZAI Y; (BAUG-I) BAUGHN M R; (HILL-I) HILLMAN J L; (LALP-I) LAL P; (LUDA-I) LU D A M; (TANG-I) TANG Y T; (YUEH-I) YUE H
COUNTRY COUNT: 95
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001044448	A2	20010621	(200141)*	EN	136
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001020675	A	20010625	(200162)		
EP 1242583	A2	20020925	(200271)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
JP 2003516750	W	20030520	(200334)		181
US 2003124106	A1	20030703	(200345)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

WO 2001044448 A2	WO 2000-US33158	20001207
AU 2001020675 A	AU 2001-20675	20001207
EP 1242583 A2	EP 2000-983992	20001207
	WO 2000-US33158	20001207
JP 2003516750 W	WO 2000-US33158	20001207
	JP 2001-545526	20001207
US 2003124106 A1	WO 2000-US33158	20001207
	US 2002-168274	20020613

FILING DETAILS:

PATENT NO KIND		PATENT NO
AU 2001020675 A	Based on	WO 2001044448
EP 1242583 A2	Based on	WO 2001044448
JP 2003516750 W	Based on	WO 2001044448

PRIORITY APPLN. INFO: US 1999-172367P 19991216
AN 2001-390245 [41] WPIDS
AB WO 200144448 A UPAB: 20010724
NOVELTY - Isolated **human oxidoreductase proteins** (I) (referred as ORP 1-27) having defined sequence (PS) of 468, 254, 555, 337, 109, 385, 312, 160, 487, 524, 144, 373, 305, 500, 369, 145, 255, 246, 467, 317, 181, 360, 476, 621, 245, 159 or 291 amino acids (aa) given in specification, a naturally occurring aa sequence having 90% sequence identity to PS, or biologically active or immunogenic fragment of PS, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) isolated polynucleotide (II) encoding (I). (II) comprises a defined sequence of 1557, 1106, 2180, 1311, 921, 2032, 1134, 734, 2221, 1706, 549, 1363, 1196, 1926, 1727, 611, 1352, 1458, 1884, 1400, 1313, 1459, 2101, 2440, 1072, 1040 (S28-S53) or 1624 (S54) nucleotides given in the specification, is a naturally occurring polynucleotide sequence having 70% identity to the above mentioned polynucleotide sequences, a polynucleotide sequence which is complementary to the above sequences, or is an RNA equivalent of the above sequences;

(2) recombinant polynucleotide (III) comprising a promoter sequence operably linked to (II);

(3) cell (IV) transformed with (III);

(4) transgenic organism comprising (III);

(5) preparation of (I);

(6) isolated antibody that specifically binds to (I);

(7) detecting a target polynucleotide in a sample which comprises a sequence of (II) comprising hybridizing the sample with a probe containing at least 20 contiguous nucleotides which is complementary to the target polynucleotide in the sample and which specifically hybridizes to the target polynucleotide, under conditions where a hybridization complex forms between the probe and the target polynucleotide or its fragments, and then detecting the presence/absence of the hybridization complex, and, optionally, amount of the target polynucleotide is also quantitated. Alternately, method is carried out by amplifying target polynucleotide or its fragments by polymerase chain reaction (PCR) and then detecting the presence/absence of the target polynucleotide or its fragment;

(8) isolated polynucleotide comprising 60 contiguous nucleotides of (II);

(9) screening a compound for effectiveness as an agonist or antagonist of (I) comprising exposing a sample containing (I) to a compound and detecting agonist or antagonist activity in the sample;

(10) screening for a compound that specifically binds to (I) comprising combining (I) with a test compound under suitable conditions and then detecting binding of (I) to the test compound;

(11) screening for a compound that modulates the activity of (I) comprising combining (I) with a test compound under conditions permissive for the activity of (I), assessing the activity of (I) in the presence of the test compound and then comparing the activity of (I) in the presence and absence of the test compound, change in the activity of (I) in the presence of the test compound is indicative of a compound that modulates the activity of (I); and

(12) screening a compound for effectiveness in altering expression of a target polynucleotide which comprises a sequence of (S28)-(S53) or (S54) comprising exposing the sample containing the target polynucleotide to a compound, under conditions suitable for the expression of the target polynucleotide and comparing expression in the presence of varying amounts and in the absence of the compound.

ACTIVITY - Antiarteriosclerotic; antiinflammatory; antipsoriatic; cytostatic; hepatotrophic; anticoagulant; thrombolytic; antithyroid; immunosuppressive; antidiabetic; antiinfertility; gynecological; depilatory; osteopathic; antilipemic; anorectic; vasotropic; anticonvulsive; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; tranquilizer; neuroleptic; anti-HIV; dermatological; antiallergic; antianemic; antiasthmatic; nephrotophic; antigout; antiarthritic; antirheumatic; ophthalmological; antiviral; antibacterial; antiulcer. No supporting data is given.

MECHANISM OF ACTION - ORP expression or activity modulators; gene therapy.

USE - (I) is useful for identifying compounds that bind to (I) or which modulate activity of (I). (II) is useful for assessing toxicity of a test compound (claimed).

(I) and (II) are useful for diagnosing, treating or preventing cell proliferative disorders such as actinic keratosis, arteriosclerosis, atherosclerosis, bursitis, cirrhosis, hepatitis, psoriasis, mixed connective tissue disease (MCTD), myelofibrosis, a cancer; endocrine disorders such as hypophysectomy, aneurysms, thrombosis, diabetes insipidus, sarcoidosis, giantism, goiter, myxedema, autoimmune thyroiditis (Hashimoto's disease), Grave's disease, Type I or Type II mellitus, hyperplasia, amyloidosis, Cushing's disease, Addison's disease, infertility, endometriosis, amenorrhea, galactorrhea, hirsutism, breast cancer, osteoporosis, and syndrome of 5 alpha -reductase; metabolic disorders such as Addison's disease, cystic fibrosis, diabetes, hypercholesterolemia, obesity or phenylketonuria; reproductive disorders such as infertility, ovulatory defects, disruptions of the menstrual cycle, endometrial and ovarian tumors; neurological disorders such as epilepsy, stroke, Alzheimer's disease, Huntington's disease, Parkinson's disease, bacterial and viral meningitis, brain abscess, Creutzfeldt-jakob disease, cerebral palsy, autonomic nervous system disorders, cranial nerve disorders, spinal cord diseases, muscular dystrophy and other neuromuscular disorders, anxiety, amnesia, and schizophrenic disorders; viral disorders; and

autoimmune/inflammatory disorders such as acquired immunodeficiency syndrome (AIDS), Addison's disease, adult respiratory distress syndrome, allergies, amyloidosis, anemia, asthma, autoimmune hemolytic anemia, autoimmune thyroiditis, autoimmune polyendocrinopathy and Crohn's disease, atopic dermatitis, Goodpasture's syndrome, gout, multiple sclerosis, osteoarthritis, osteoporosis, psoriasis, rheumatoid arthritis or ulcerative colitis. (II) is useful to detect upstream sequences such as promoters and regulatory elements. (II) is useful for creating knock out or knock in humanized animals or transgenic animals to model human disease. (II) is useful for somatic or germline gene therapy for treating the above mentioned disorders. Oligonucleotide primers derived from (II) may be used to detect single nucleotide polymorphisms and for mapping the naturally occurring genomic sequences. (II) is useful for generating a transcript image of a tissue or cell type.-

(I), its catalytic or immunogenic fragments are useful for screening libraries of compounds in several drug screening assays.

A vector encoding (I) or its fragments is also useful for treating the above mentioned disorders. Antibodies which bind to (I) may be used for diagnosis of disorders characterized by expression of (I) or in assays to monitor patients being treated with ORP or agonists, antagonists or inhibitors of ORP and for assessing toxicity of a test compound.

Dwg.0/0

L54 ANSWER 5 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-025146 [03] WPIDS
CROSS REFERENCE: 2000-602121 [57]; 2001-025334 [03]; 2001-041141 [05]
DOC. NO. CPI: C2001-007759
TITLE: New **human oxidoreductase proteins** useful for diagnosing, treating or preventing proliferative, neurological, genetic, smooth muscle, autoimmune or inflammatory disorders associated with abnormal expression of oxidoreductase proteins.
DERWENT CLASS: B04 D16
INVENTOR(S): BAUGHN, M R; LU, D A M; TANG, Y T; YUE, H
PATENT ASSIGNEE(S): (INCY-N) INCYTE GENOMICS INC
COUNTRY COUNT: 89
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000071679	A2	20001130	(200103)*	EN	94
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW					
AU 2000050342	A	20001212	(200115)		
AU 2000050482	A	20001218	(200118)		
EP 1183370	A2	20020306	(200224)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
JP 2003517288	W	20030527	(200344)		145

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000071679	A2	WO 2000-US13879	20000519
AU 2000050342	A	AU 2000-50342	20000519
AU 2000050482	A	AU 2000-50482	20000526
EP 1183370	A2	EP 2000-932647	20000519
		WO 2000-US13879	20000519
JP 2003517288	W	JP 2000-620057	20000519
		WO 2000-US13879	20000519

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000050342	A	Based on	WO 2000071679
AU 2000050482	A	Based on	WO 2000073334
EP 1183370	A2	Based on	WO 2000071679
JP 2003517288	W	Based on	WO 2000071679

PRIORITY APPLN. INFO: US 1999-136740P 19990527; US 1999-135049P 19990520; US 1999-139566P 19990616

AN 2001-025146 [03] WPIDS

CR 2000-602121 [57]; 2001-025334 [03]; 2001-041141 [05]

AB WO 200071679 A UPAB: 20030710

NOVELTY - An isolated **human oxidoreductase protein** (I) (OXRD-1 to OXRD-8) comprising a fully defined sequence of 244 (S1), 429 (S2), 237 (S3), 157 (S4), 300 (S5), 377 (S6), 95 (S7) and 563 (S8) amino acids as given in the specification, a naturally occurring amino acid sequence at least 90% identical to (S1-S8), or a biologically active or immunogenic fragment of (S1-S8), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an isolated polynucleotide (II) encoding (I) with a fully defined polynucleotide sequence of 1678 (S9), 1494 (S10), 1053 (S11), 979 (S12), 1010 (S13), 3021 (S14), 714 (S15) and 2519 (S16) base pairs as given in the specification, a polynucleotide sequence 90% identical to (S9-S16), polynucleotide sequences complementary to (II) and RNA equivalents;

(2) a recombinant polynucleotide (III) comprising a promoter sequence operably linked to (II);

(3) a cell (IV) transformed with (III);

(4) a transgenic organism comprising (III);

(5) producing (I) by culturing (IV) and recovering the polypeptide expressed;

(6) an isolated antibody that specifically binds to (I);

(7) detecting (II) in a sample comprises:

(a) hybridizing the sample with a complementary probe comprising at least 20 contiguous nucleotides and detecting the presence or absence of the hybridization complex, and, optionally, if present the amount of the target polynucleotide is also quantitated; or

(b) amplifying (I) or its fragments by polymerase chain reaction (PCR) and then detecting the presence or absence of the amplified polynucleotide or its fragment;

(8) an isolated polynucleotide comprising 60 contiguous

nucleotides of (II);

(9) screening a compound for effectiveness as an agonist or antagonist of (I) involves exposing a sample comprising (I) to a compound and detecting agonist or antagonist activity in the sample;

(10) screening for a compound that specifically binds to (I) involves combining (I) with a test compound under suitable conditions and then detecting binding of (I) to the test compound;

(11) screening for a compound that modulates for the activity of (I) involves combining (I) with a test compound, assessing the activity of (I) in the presence of the test compound in comparison to the activity of (I) in the absence of the test compound. A change in the activity of (I) in the presence of the test compound is indicative of a compound that modulates the activity of (I); and

(12) screening a compound for effectiveness in altering expression of (I) involves exposing a sample comprising (I) and then detecting altered expression of (I).

ACTIVITY - Antiarteriosclerotic; antiatherosclerotic; antiinflammatory; antiviral; cytostatic; anticonvulsant; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; antibacterial; antianginal; antiasthmatic; antiarrhythmic; immunosuppressive; hypotensive; hyperglycemic; cardiant; anti-HIV; antiallergic; antianemic; antithyroid; antipsoriotic; antiarthritic; antirheumatoid; antiulcer. No supporting data is given.

MECHANISM OF ACTION - OXRD expression or activity modulators; gene therapy.

USE - The pharmaceutical compositions comprising (I) or an agonist of (I) is useful for treating a disease or condition associated with decreased expression of functional OXRD. The pharmaceutical composition comprising the antagonist of (I) is useful for treating a disease or condition associated with overexpression of (I) (claimed). Polynucleotides encoding (I) or their mammalian homologs are useful for creating knock out or knock in humanized animals or transgenic animals to model human disease. (I) is useful for treating a proliferative, neurological, genetic, smooth muscle and autoimmune/inflammatory disorders such as cell proliferative disorder such as actinic keratosis, arteriosclerosis, atherosclerosis, bursitis, cirrhosis, hepatitis, mixed connective tissue disease (MCTD), myelofibrosis etc., cancers including adenocarcinoma, leukemia, lymphoma, melanoma etc., a neurological disorder such as epilepsy, stroke, Alzheimer's disease, Pick's disease, Huntington's disease, Parkinson's disease etc., bacterial and viral meningitis, brain abscess, autonomic nervous system disorders, cranial nerve disorders, spinal cord diseases, muscular dystrophy and other neuromuscular disorders, peripheral nervous system disorders, dermatomyositis and polymyositis, inherited, metabolic, endocrine, and toxic myopathies, myasthenia gravis, periodic paralysis, mental disorders, smooth muscle disorder such as angina, anaphylactic shock, cardiovascular shock, Cushing's syndrome, hypertension, hypoglycemia, myocardial infraction and an autoimmune/inflammatory disorder such as acquired immuno deficiency syndrome (AIDS), Addison's disease, adult respiratory distress syndrome, allergies, amyloidosis, anemia, asthma, autoimmune hemolytic anemia, autoimmune thyroiditis, autoimmune polyendocrinopathy and Crohn's disease, psoriasis, rheumatoid arthritis or ulcerative colitis. A vector encoding (I) or its fragments is also useful for treating the above mentioned disorders. (II) is useful for somatic or germline gene therapy for treating the above mentioned disorders. Antibodies which bind to (I) may be used

for diagnosis of disorders characterized by expression of (I) or in assays to monitor patients being treated with OXRD or agonists, antagonists or inhibitors of OXRD. The polynucleotides encoding (I) may also be used for diagnostic purposes to determine absence, presence and excess expression of (I), and to monitor regulation of OXRD levels during therapeutic intervention. They are also used for the diagnosis of the above mentioned disorders associated with (I). The nucleotide sequences encoding (I) may be used in assays for detecting the presence of the associated disorders as mentioned above. Oligonucleotide primers derived from (II) may be used to detect single nucleotide polymorphisms. (II) may also be used for generating hybridization probes useful in mapping the naturally occurring genomic sequences. (I), its catalytic or immunogenic fragments are useful for screening libraries of compounds in several drug screening assays.
Dwg.0/0

L54 ANSWER 6 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2000-117171 [10] WPIDS
DOC. NO. CPI: C2000-035911
TITLE: New polypeptide, its antagonist useful for treatment and prevention of neurological, inflammatory, reproductive, endocrine, cell proliferative and smooth muscle disorders.
DERWENT CLASS: B04 D16
INVENTOR(S): BANDMAN, O; BAUGHN, M R; CORLEY, N C; GORGONE, G A; GUEGLER, K J; HILLMAN, J L; LAL, P; TANG, Y T
PATENT ASSIGNEE(S): (INCY-N) INCYTE PHARM INC
COUNTRY COUNT: 84
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000000622	A2	20000106	(200010)*	EN	88
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
AU 9948437	A	20000117	(200026)		
EP 1092032	A2	20010418	(200123)	EN	
R: BE DE ES FR GB IT NL					
JP 2002519034	W	20020702	(200246)		120

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000000622	A2	WO 1999-US14711	19990629
AU 9948437	A	AU 1999-48437	19990629
EP 1092032	A2	EP 1999-932044	19990629
		WO 1999-US14711	19990629
JP 2002519034	W	WO 1999-US14711	19990629
		JP 2000-557375	19990629

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9948437	A	Based on	WO 2000000622
EP 1092032	A2	Based on	WO 2000000622
JP 2002519034 W		Based on	WO 2000000622

PRIORITY APPLN. INFO: US 1998-155241P 19980716; US 1998-91177P 19980630

AN 2000-117171 [10] WPIDS

AB WO 200000622 A UPAB: 20000228

NOVELTY - A substantially purified polypeptide (I) (or fragments) of **human oxidoreductase protein** (**HORP**) comprising a sequence of 310, 520, 349, 332, 444 or 286 amino acids all fully defined in the specification, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a substantially purified variant of (I) having 90% amino acid identity;

(2) an isolated and purified polynucleotide (II) encoding (I);

(3) an isolated and purified polynucleotide variant of (II) having 90% identity;

(4) an isolated and purified polynucleotide (III) sequence complementary to (II);

(5) an expression vector (IV) comprising at least a fragment of (II);

(6) a host cell (V) comprising (IV);

(7) a pharmaceutical composition (VI) comprising (I);

(8) a method for producing (I), comprising culturing the host cell of (6), under expression conditions and recovering (I) from the culture;

(9) a purified antibody (VII) which specifically binds to (I);

(10) a purified agonist of (I);

(11) a purified antagonist of (I);

(12) a method for treating or preventing a disorder associated with decreased expression or activity of HORP, comprising administering (VI);

(13) a method for treating or preventing a disorder associated with increased expression or activity of HORP, comprising administering the antagonist of (11); and

(14) a method of detecting (II) in a biological sample, using its complement as a hybridization probe.

ACTIVITY - Immunosuppressive; antiinflammatory; cytostatic; gynecological; neuroprotective; antiarteriosclerotic.

MECHANISM OF ACTION - Modulator of HORP expression. No supporting data given.

USE - Pharmaceutical composition (VI) is useful for preventing or treating disorders associated with decreased expression or activity of **HORP**, while antagonist of (I) is useful for preventing or treating disorders associated with increased expression of **HORP** (claimed). Such disorders include neurological, autoimmune, reproductive, cell proliferative, vesicle trafficking, endocrine disorders and cancer in mammal, especially in **humans**. Vector (IV), agonist of (I) are also useful for treating or preventing **HORP** associated disorders. **HORP** is useful for producing antibodies and for drug screening using libraries of compounds. **HORP** polynucleotides and their antibodies are useful for diagnosis of disorders associated with **HORP** expression. Polynucleotides

are also useful as targets in a microarray and for generating hybridization probes useful in mapping the naturally occurring genomic sequences. Complement of (II) encoding **HORP**, is useful for blocking mRNA transcription, modulating **HORP** activity or to regulate gene function.

ADVANTAGE - The pharmaceutical composition does not have any adverse side effect.

Dwg.0/2

L54 ANSWER 7 OF 24 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 2001101542 MEDLINE
DOCUMENT NUMBER: 20545359 PubMed ID: 11092974
TITLE: Identification of genes associated with the progression of adult T cell leukemia (ATL).
AUTHOR: Kohno T; Moriuchi R; Katamine S; Yamada Y; Tomonaga M; Matsuyama T
CORPORATE SOURCE: Department of Molecular Microbiology and Immunology, Nagasaki University Graduate School of Medicine, Nagasaki 852-8523, Japan.. tomoko@net.nagasaki-u.ac.jp
SOURCE: JAPANESE JOURNAL OF CANCER RESEARCH, (2000 Nov) 91 (11) 1103-10.
Journal code: 8509412. ISSN: 0910-5050.
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200102
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20010201

AB Patients with adult T-cell leukemia/lymphoma (ATL) exhibit a variety of clinical features, and this disease is therefore clinically subclassified into acute, lymphomatous, chronic, and smoldering types. Acute ATL is a typical leukemic form of ATL with rapid progression, and chronic ATL is a less aggressive clinical form allowing long-term survival even without chemotherapy. In the present study, we used fresh peripheral blood mononuclear cells (PBMC) from both types of ATL patients to identify molecules that may contribute to the difference between acute and chronic ATL. Isolated mRNAs expressed differentially between the two types of ATL include a T-cell differentiation antigen (MAL), a lymphoid-specific member of the G-protein-coupled receptor family (EBI-1 / CCR7), a novel human homologue to a subunit (MNLL) of the bovine ubiquinone **oxidoreductase** complex, and a **human** fibrinogen-like **protein** (hpT49). We found that the former three are upregulated in acute ATL and the last is down-regulated in both chronic and acute ATL. We speculate that dysregulation of the genes may account for the malignant features of ATL cells, in terms of growth, energy metabolism, and motility.

L54 ANSWER 8 OF 24 MEDLINE on STN DUPLICATE 3
ACCESSION NUMBER: 1999389130 MEDLINE
DOCUMENT NUMBER: 99389130 PubMed ID: 10462034
TITLE: Cellular expression of xanthine **oxidoreductase protein** in normal **human** tissues.
AUTHOR: Linder N; Rapola J; Raivio K O

CORPORATE SOURCE: Research Laboratory, Hospital for Children and Adolescents, University of Helsinki, Finland.. nina.linder@huch.fi
SOURCE: LABORATORY INVESTIGATION, (1999 Aug) 79 (8) 967-74. Journal code: 0376617. ISSN: 0023-6837.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199909
ENTRY DATE: Entered STN: 19990913
Last Updated on STN: 19990913
Entered Medline: 19990902

AB Xanthine oxidoreductase is an important cytoplasmic source of reactive oxygen species, and has been implicated in the pathogenesis of ischemia-reperfusion damage. Because the cellular localization of this protein remains unclear, our aim was to study its distribution in fresh normal human tissue obtained at surgery. For immunohistochemical studies we purified the protein from human milk and raised a polyclonal antibody in rabbits. In the liver the protein was preferentially localized to the periportal hepatocytes and it was absent from the perivenous region. In the proximal intestine, the protein was expressed in epithelial cells and goblet cells. Lactating mammary gland acinar cells showed intense staining. Small vessel vascular endothelial cells of the intestine, mammary gland, and skeletal muscle showed immunoreactivity, but in the kidney, glomerular endothelial cells were negative. No cells in the heart, brain, or lung expressed the enzyme protein. The observed localization of the xanthine oxidoreductase protein is consistent with previously observed enzyme activities in the organs studied. The widely assumed exclusive localization to capillary endothelium obviously does not apply to humans.

L54 ANSWER 9 OF 24 MEDLINE on STN DUPLICATE 4
ACCESSION NUMBER: 1999097250 MEDLINE
DOCUMENT NUMBER: 99097250 PubMed ID: 9878551
TITLE: cDNA of eight nuclear encoded subunits of NADH:ubiquinone oxidoreductase: human complex I cDNA characterization completed.
AUTHOR: Loeffen J L; Triepels R H; van den Heuvel L P; Schuelke M; Buskens C A; Smeets R J; Trijbels J M; Smeitink J A
CORPORATE SOURCE: University Hospital Nijmegen, Nijmegen Center for Mitochondrial Disorders, The Netherlands.
SOURCE: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1998 Dec 18) 253 (2) 415-22. Journal code: 0372516. ISSN: 0006-291X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AF044954; GENBANK-AF044955; GENBANK-AF044957; GENBANK-AF044958; GENBANK-AF050637; GENBANK-AF050639; GENBANK-AF087659; GENBANK-AF087660; GENBANK-AF087661
ENTRY MONTH: 199901
ENTRY DATE: Entered STN: 19990202
Last Updated on STN: 20000303
Entered Medline: 19990120

AB NADH:ubiquinone oxidoreductase (complex I) is an extremely complicated multiprotein complex located in the inner mitochondrial membrane. Its main function is the transport of electrons from NADH to ubiquinone, which is accompanied by translocation of protons from the mitochondrial matrix to the intermembrane space. Human complex I appears to consist of 41 subunits of which 34 are encoded by nDNA. Here we report the cDNA sequences of the hitherto uncharacterized 8 nuclear encoded subunits, all located within the hydrophobic protein (HP) fraction of complex I. Now all currently known 41 **proteins** of **human** NADH:ubiquinone **oxidoreductase** have been characterized and reported in literature, which enables more complete mutational analysis studies of isolated complex I-deficient patients.
Copyright 1998 Academic Press.

L54 ANSWER 10 OF 24 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN
ACCESSION NUMBER: 1998:922440 SCISEARCH
THE GENUINE ARTICLE: 139VP
TITLE: Localization of xanthine **oxidoreductase** **protein** in normal **human** tissues
AUTHOR: Linder N (Reprint); Raivio K O
CORPORATE SOURCE: UNIV HELSINKI, HOSP CHILDREN & ADOLESCENTS, HELSINKI, FINLAND
COUNTRY OF AUTHOR: FINLAND
SOURCE: FREE RADICAL BIOLOGY AND MEDICINE, (NOV 1998) Vol. 25, Supp. [1], pp. 34-34.
Publisher: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND.
ISSN: 0891-5849.
DOCUMENT TYPE: Conference; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 0

L54 ANSWER 11 OF 24 MEDLINE on STN DUPLICATE 5
ACCESSION NUMBER: 96152516 MEDLINE
DOCUMENT NUMBER: 96152516 PubMed ID: 8573067
TITLE: Relationship of human liver dihydrodiol dehydrogenases to hepatic bile-acid-binding **protein** and an **oxidoreductase** of **human** colon cells.
AUTHOR: Hara A; Matsuura K; Tamada Y; Sato K; Miyabe Y; Deyashiki Y; Ishida N
CORPORATE SOURCE: Biochemistry Laboratory, Gifu Pharmaceutical University, Japan.
SOURCE: BIOCHEMICAL JOURNAL, (1996 Jan 15) 313 (Pt 2) 373-6.
Journal code: 2984726R. ISSN: 0264-6021.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-D26124; GENBANK-M86609; GENBANK-U05684
ENTRY MONTH: 199603
ENTRY DATE: Entered STN: 19960315
Last Updated on STN: 19970203
Entered Medline: 19960301
AB We previously isolated three monomeric dihydrodiol dehydrogenases,

DD1, DD2 and DD4, from human liver, and cloned a cDNA (C9) thought to encode DD2, which is identical with those for human bile-acid-binding **protein** and an **oxidoreductase** of **human** colon carcinoma HT29 cells. In the present study we have provided evidence that the C9 cDNA clone encodes DD1, not DD2. A recombinant enzyme expressed from the cDNA in a bacterial system was purified, and its catalytic properties, bile-acid-binding ability and primary sequence were compared with those of the hepatic dihydrodiol dehydrogenases. The results show that DD1 encoded by C9 possesses prostaglandin F synthase activity but low affinity for lithocholic acid, whereas DD2, showing differences of six amino acid residues from the DD1 sequence, exhibited high-affinity binding for the bile acid. Refined relationship between dihydrodiol dehydrogenases and their related proteins of human tissues is proposed.

L54 ANSWER 12 OF 24 JICST-EPlus COPYRIGHT 2003 JST on STN
ACCESSION NUMBER: 960755375 JICST-EPlus
TITLE: Relationship between human liver dihydrodiol dehydrogenase and bile acid biding **protein** and **oxidoreductase** of **human** colon cancer cell.
AUTHOR: SATO KUMIKO; DEYASHIKI YOSHIHIRO; HARA AKIRA MIYABE YOSHIYUKI
CORPORATE SOURCE: Gifu Pharm. Univ.
Gifu Prefect. Tajimi Hosp.
SOURCE: Nippon Yakugakkai Nenkai Koen Yoshishu, (1996) vol. 116 , no. P 3, pp. 111. Journal Code: L0914A ISSN: 0918-9823
PUB. COUNTRY: Japan
LANGUAGE: Japanese
STATUS: New

L54 ANSWER 13 OF 24 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1996:364877 BIOSIS
DOCUMENT NUMBER: PREV199699087233
TITLE: The human B22 subunit of the NADH-ubiquinone oxidoreductase maps to the region of chromosome 8 involved in Branchio-oto-renal syndrome.
AUTHOR(S): Gu, Jessie Z.; Lin, Xin; Wells, Dan E. [Reprint author]
CORPORATE SOURCE: Dep. Biol., Inst. Mol. Biol., Univ. Houston, Houston, TX 77204, USA
SOURCE: Genomics, (1996) Vol. 35, No. 1, pp. 6-10. CODEN: GNMCEP. ISSN: 0888-7543.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 14 Aug 1996
Last Updated on STN: 26 Sep 1996
AB To identify candidate genes for Branchio-oto-renal (BOR) syndrome, we have made use of a set of cosmids that map to 8q13.3, which has previously been shown to be involved in this syndrome. These cosmids were used as genomic clones in the attempts to isolate corresponding cDNAs using a modified hybrid selection technique. cDNAs from the region were identified and used, to search for sequence similarity in **human** or NADH-ubiquinone **oxidoreductase**, a mitochondrial **protein** in the

respiratory electron transport chain. Given the history of other mitochondrial mutations being involved in hearing loss syndromes, this gene should be considered a strong candidate for involvement in BOR.

L54 ANSWER 14 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 1995-090201 [12] WPIDS
CROSS REFERENCE: 1994-048091 [06]; 1994-159123 [19]; 1995-283090 [37]; 1998-271073 [24]
DOC. NO. NON-CPI: N1995-071386
DOC. NO. CPI: C1995-040840
TITLE: Determn. of functional status of human oestrogen receptor - by immunoassay using monoclonal antibody specific for activated forms of receptor protein.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): TRAISH, A M; WOTIZ, H H
PATENT ASSIGNEE(S): (UYBO-N) UNIV BOSTON
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 5389517	A	19950214	(199512)*		41

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
US 5389517	A	Cont of	US 1989-388091	19890731
		Cont of	US 1991-784626	19911101
			US 1993-77880	19930618

FILING DETAILS:

PATENT NO	KIND		PATENT NO
US 5389517	A	Cont of	US 5312752

PRIORITY APPLN. INFO: US 1989-388091 19890731; US 1991-784626 19911101; US 1993-77880 19930618
AN 1995-090201 [12] WPIDS
CR 1994-048091 [06]; 1994-159123 [19]; 1995-283090 [37]; 1998-271073 [24]
AB US 5389517 A UPAB: 19980617
Method for determining the functional status of **human** oestrogen receptor protein (**HORP**) on the basis of the presence of 4S (activated but untransformed) and 5S (activated and transformed) forms of **HORP** comprises mixing a cellular sample with a monoclonal antibody and detecting any bound antibody, where the antibody is specific for a single epitope within amino acids 247-261 of the DNA-binding domain in the 4S and 5S forms of **HORP** and does not bind to the native (8S) forms of **HORP**. Also claimed is a method as above in which a parallel assay is performed using a polyclonal antiserum that binds to at least part of the DNA-binding domain in the 4S, 5S and 8S forms, and the results of the two assays are compared. Also claimed are test kits for the above purpose.
USE - The methods may be used diagnostically to identify the

functional status and activation state of the human oestrogen receptor in a cellular sample, specifically breast cancer tissue samples. This data highlights individuals who may respond better to hormonal therapy of breast cancer as opposed to cytotoxic chemotherapy or vice versa.
Dwg.0/20

L54 ANSWER 15 OF 24 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1994:90938 BIOSIS
DOCUMENT NUMBER: PREV199497103938
TITLE: Monoclonal antibodies against **human** thiol-**protein**-disulfide-**oxidoreductase** as tools in B cell immunophenotyping of lymphomas and leukemias.
AUTHOR(S): Kroening, H.; Wacker, H.-H.; Franke, A.; Ansorge, S.
CORPORATE SOURCE: Med. Acad. Magdeburg, Dep. Intern. Med., Div. Exp. Immunol., 39120 Magdeburg, Leipziger Str. 44, Germany
SOURCE: Annals of Hematology, (1993) Vol. 67, No. SUPPL., pp. A70.
Meeting Info.: Annual Meeting of the German and the Austrian Society of Hematology and Oncology. Essen, Germany. October 10-13, 1993.
ISSN: 0939-5555.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 5 Mar 1994
Last Updated on STN: 18 Nov 1994

L54 ANSWER 16 OF 24 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1993:45008 BIOSIS
DOCUMENT NUMBER: PREV199344021858
TITLE: Monoclonal antibodies against **human** thiol **protein** disulfide **oxidoreductase** in immunophenotyping of leukemias and lymphomas.
AUTHOR(S): Kroening, H. [Reprint author]; Kaehne, T. [Reprint author]; Essbach, U.; Kuehne, W.; Franke, A.; Ansorge, S. [Reprint author]
CORPORATE SOURCE: Medical Academy Magdeburg, Dep. Intern. Med., Div. Exp. Immunol., Magdeburg, Germany
SOURCE: Annals of Hematology, (1992) Vol. 65, No. SUPPL., pp. A86.
Meeting Info.: Annual Congress of the German Society of Hematology and Oncology, Berlin, Germany, October 4-7, 1992. ANN HEMATOL.
ISSN: 0939-5555.
DOCUMENT TYPE: Conference; (Meeting)
LANGUAGE: English
ENTRY DATE: Entered STN: 4 Jan 1993
Last Updated on STN: 10 Feb 1993

L54 ANSWER 17 OF 24 MEDLINE on STN
ACCESSION NUMBER: 92197429 MEDLINE
DOCUMENT NUMBER: 92197429 PubMed ID: 1801596
TITLE: [Immunochemical determination of **human** thiol **protein** disulfide

oxidoreductase in cell and tissue homogenates by competitive EIA].
Immunochemische Bestimmung der humanen Thiol-Proteindisulfid-Oxidoreduktase in Zell- und Gewebshomogenaten mit Hilfe eines kompetitiven EIA.

AUTHOR: Kroning H; Mansfeld H W; Held C; Thiel U; Ansorge S
CORPORATE SOURCE: Forschungsabteilung Experimentelle Immunologie, Medizinischen Akademie Magdeburg.
SOURCE: ALLERGIE UND IMMUNOLOGIE, (1991) 37 (2) 89-96.
Journal code: 0314702. ISSN: 0323-4398.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: German
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199204
ENTRY DATE: Entered STN: 19920509
Last Updated on STN: 19980206
Entered Medline: 19920422

AB Different monospecific antisera against thiol-protein disulfide oxidoreductase (TPO, EC 1.8.4.2, protein-disulfide isomerase, EC 5.3.4.1) were raised in rabbits by immunization with purified human TPO and characterized by means of Laurell and immunoblot techniques. A competitive anti-TPO-EIA with insolubilized TPO has been used to determine this enzyme in cells and tissue homogenates. The assay shows a sensitivity of 1.2 ng/ml and a specificity of about 99%. The TPO content in relation to the total protein was found to be: in pancreas 0.65%, liver 0.45%, spleen 0.12%, placenta 0.16%, tonsils 0.06% and lymph nodes 0.03%.

L54 ANSWER 18 OF 24 MEDLINE on STN DUPLICATE 6
ACCESSION NUMBER: 89313720 MEDLINE
DOCUMENT NUMBER: 89313720 PubMed ID: 2501655
TITLE: Human NADPH-P450 oxidoreductase: complementary DNA cloning, sequence and vaccinia virus-mediated expression and localization of the CYPOR gene to chromosome 7.
AUTHOR: Yamano S; Aoyama T; McBride O W; Hardwick J P; Gelboin H V; Gonzalez F J
CORPORATE SOURCE: Laboratory of Molecular Carcinogenesis, National Cancer Institute, Bethesda, Maryland 20892.
SOURCE: MOLECULAR PHARMACOLOGY, (1989 Jul) 36 (1) 83-8.
Journal code: 0035623. ISSN: 0026-895X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198908
ENTRY DATE: Entered STN: 19900309
Last Updated on STN: 19900309
Entered Medline: 19890822

AB The cDNA containing the full coding sequence of human NADPH-P450 oxidoreductase was isolated and completely sequenced. The cDNA contained 2398 base pairs, including 9 and 358 base pairs of 5' and 3' noncoding sequences, respectively. The **human** NADPH-P450 **oxidoreductase protein** deduced from the cDNA has 677 amino acids, with a calculated molecular weight of 76,656. The cDNA nucleotide and deduced amino acid sequences displayed 83 and 92% similarities, respectively, with those of the

rat NADPH-P450 oxidoreductase. By use of somatic cell hybrids, the NADPH-P450 oxidoreductase gene was regionally localized to human chromosome 7 (7p15-q35). The levels of NADPH-P450 oxidoreductase protein and mRNA were analyzed in 13 human liver specimens and less than 3-fold variation was found among the different livers. The NADPH-P450 oxidoreductase cDNA was inserted into vaccinia virus and expressed in cell culture. The cDNA-expressed enzyme was active in reducing the electron acceptor cytochrome c. In addition, the NADPH-P450 oxidoreductase stimulated the enzymatic activity of vaccinia virus-expressed human P3(450) when both recombinant viruses were used to coinfect human cells in culture. An approximate equal mole level of NADPH-P450 oxidoreductase and P3(450) was required to achieve maximal activity for both ethoxycoumarin O-deethylase and aryl hydrocarbon hydroxylase.

L54 ANSWER 19 OF 24 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 1986:133997 BIOSIS
DOCUMENT NUMBER: PREV198681044413; BA81:44413
TITLE: THE THIOL-**PROTEIN** SULFIDE **OXIDOREDUCTASE** IN **HUMAN** MONONUCLEAR CELLS OF BLOOD AND BONE MARROW.
AUTHOR(S): ANSORGE S [Reprint author]; MANSFELD H-W; HELD C; BROODTAERTS L; VAN KAMP B
CORPORATE SOURCE: ABT EXPERIMENTELLE IMMUNOLOGIE DER KLINIK FUR INNERE MEDIZIN DER MEDIZINISCHEN AKADEMIE MAGDEBURG, DDR-3090 MAGDEBURG, LEIPZIGER STRASSE 44
SOURCE: Acta Histochemica, (1986) Vol. 78, No. 1, pp. 65-71. CODEN: AHISA9. ISSN: 0065-1281.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 25 Apr 1986
Last Updated on STN: 25 Apr 1986

AB The in vivo function of the thiol-proteindisulfide oxidoreductase (TPO, EC 1.8.4.2; protein-disulfideisomerase, EC 5.3.4.1) in biosynthesis of immunoglobulin was investigated by studying the enzyme content in human lymphoid and other cells by an immunocytochemical method. In contrast to peripheral blood, B lymphocytes which showed no or no demonstrable TPO, normal as well as malignant bone marrow plasma cells (all Ig classes) were found to contain abundant amounts of this enzyme. TPO containing plasma cells were identified by doubling-staining techniques. This finding suggests that TPO is involved in the terminal step of B cell differentiating and immunoglobulin biosynthesis. Besides plasma cells, approximately 10% of mononuclear marrow cells as yet unidentified medium-sized and large cells, exhibited also strong anti-TPO reactivity. Furthermore, using surface-cytoplasmic double staining methods, monocytes from human peripheral blood could be identified to represent the only cytoplasmic TPO-containing normal mononuclear blood cells.

L54 ANSWER 20 OF 24 MEDLINE on STN DUPLICATE 7

ACCESSION NUMBER: 83178331 MEDLINE
DOCUMENT NUMBER: 83178331 PubMed ID: 6340679
TITLE: Identification of thiol:**protein** disulfide **oxidoreductase** activity in cultured **human** fibroblasts: dependence of enzyme

activity on growth conditions.
AUTHOR: Morin J E; Dixon J E; Chang P P; Moss J
CONTRACT NUMBER: AM 18024 (NIADDK)
GM 02711 (NIGMS)
SOURCE: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1983 Mar 29) 111 (3) 872-7.
Journal code: 0372516. ISSN: 0006-291X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198305
ENTRY DATE: Entered STN: 19900318
Last Updated on STN: 19970203
Entered Medline: 19830505

AB Thiol:protein disulfide oxidoreductase activity was assayed in extracts of cultured normal human skin fibroblasts. Enzyme activity in confluent fibroblasts was dependent on growth conditions. In serum-deprived fibroblasts grown in minimal medium enzyme activity was approximately 40% of that observed in fibroblasts maintained in medium supplemented with 10% fetal calf serum. In fibroblasts cultured in medium supplemented only with insulin, activity was 35% greater than that in fibroblasts cultured in unsupplemented defined medium. Antibodies raised against purified bovine liver thiol:protein disulfide oxidoreductase immunoprecipitated all of the activity present in fibroblast extracts. The thiol:**protein** disulfide **oxidoreductase** from **human** fibroblasts thus appears to share antigenic determinants with the bovine liver enzyme. The human fibroblast may serve as an in vitro model to study the regulation of the oxidoreductase.

L54 ANSWER 21 OF 24 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 82139513 EMBASE
DOCUMENT NUMBER: 1982139513
TITLE: [Immunohistochemical detection of insulin, C-peptide and thiol **protein** disulfide **oxidoreductase** in **human** brain].
IMMUNHISTOCHEMISCHER NACHWEIS VON INSULIN, C-PEPTID UND THIOL: PROTEINDISULFID-OXIDOREDUCTASE (TPO) IM MENSCHLICHEN GEHIRN.
AUTHOR: Dorn A.; Bernstein H.-G.; Rinne A.; et al.
CORPORATE SOURCE: Finland
SOURCE: Acta Anatomica, (1981) 111/1-2 (34-35).
CODEN: ACATA5
COUNTRY: Switzerland
DOCUMENT TYPE: Journal
LANGUAGE: German

L54 ANSWER 22 OF 24 SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN
ACCESSION NUMBER: 81:466107 SCISEARCH
THE GENUINE ARTICLE: MH924
TITLE: IMMUNOHISTOCHEMICAL DETECTION OF INSULIN, C-PEPTIDE AND THIOL - **PROTEIN** DISULFIDE **OXIDO-REDUCTASE** IN THE **HUMAN**-BRAIN
AUTHOR: DORN A (Reprint); BERNSTEIN H G; RINNE A; HAHN H J; ZIEGLER M; ANSORGE S

SOURCE: ACTA ANATOMICA, (1981) Vol. 111, No. 1-2, pp. 34-35.
DOCUMENT TYPE: Conference; Journal
FILE SEGMENT: LIFE
LANGUAGE: German
REFERENCE COUNT: No References

L54 ANSWER 23 OF 24 MEDLINE on STN DUPLICATE 8
ACCESSION NUMBER: 72189349 MEDLINE
DOCUMENT NUMBER: 72189349 PubMed ID: 5028155
TITLE: Thiol-**protein** disulfide **oxidoreductase** activity in **human** placental tissue homogenates.
AUTHOR: Branda L A; Ferrier B M; Celhoffer L
SOURCE: CANADIAN JOURNAL OF BIOCHEMISTRY, (1972 May) 50 (5) 507-9.
Journal code: 0421034. ISSN: 0008-4018.
PUB. COUNTRY: Canada
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197207
ENTRY DATE: Entered STN: 19900310
Last Updated on STN: 19900310
Entered Medline: 19720727

L54 ANSWER 24 OF 24 CONFSCI COPYRIGHT 2003 CSA on STN
ACCESSION NUMBER: 1999:16634 CONFSCI
DOCUMENT NUMBER: 99-029128
TITLE: Localization of xanthine **oxidoreductase** **protein** in normal **human** tissues
AUTHOR: Linder, N.; Raivio, K.O.
CORPORATE SOURCE: Hosp. for Children and Adolescents, Univ. Helsinki, Finland
SOURCE: Elsevier Science, Inc., Commercial Reprints Dept., 655 Avenue of the Americas, New York, NY 10010-5107, USA; phone: (212) 633-3813; fax: (212) 633-3820; email: d.croninlsevier.com, Abstracts available. Price for subscription is $336. Contact Elsevier for individual price. Paper No. 34.
Meeting Info.: 984 5040: 5th Annual Meeting of the Oxygen Society (9845040). Washington, DC (USA). 19-23 Nov 1998. Natl Heart Lung and Blood Institute, Geneka Biotech, Henkel Nutrition and Health Group, Oxis Intl, Shaklee Technica, ESA Inc., Procter & Gamble Pharmaceuticals Inc., VERIS Research Information Service, Elsevier Science Inc..
DOCUMENT TYPE: Conference
FILE SEGMENT: DCCP
LANGUAGE: English

(FILE 'USPATFULL' ENTERED AT 12:34:54 ON 16 DEC 2003)
L44 1 SEA FILE=REGISTRY ABB=ON PLU=ON OXIDOREDUCTASE/CN
L48 11542 SEA FILE=HCAPLUS ABB=ON PLU=ON L44 OR OXIDO REDUCTASE OR OXIDOREDUCTASE
L49 306 SEA FILE=HCAPLUS ABB=ON PLU=ON L48(3A)HUMAN
L50 48 SEA FILE=HCAPLUS ABB=ON PLU=ON L49(3A)PROTEIN
L51 2 SEA FILE=HCAPLUS ABB=ON PLU=ON HORP(S)HUMAN
L61 15 SEA FILE=USPATFULL ABB=ON PLU=ON L50 OR L51

L61 ANSWER 1 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2003:250454 USPATFULL

TITLE: Stabilized protein crystals, formulations comprising them and methods of making them

INVENTOR(S): Margolin, Alexey L., Newton, MA, UNITED STATES
Khalaf, Nazar K., Worcester, MA, UNITED STATES
St. Clair, Nancy L., Ann Arbor, MI, UNITED STATES
Rakestraw, Scott L., Newark, DE, UNITED STATES
Shenoy, Bhami C., Woburn, MA, UNITED STATES

PATENT ASSIGNEE(S): Altus Biologics Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003175239	A1	20030918
APPLICATION INFO.:	US 2003-383266	A1	20030305 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-374132, filed on 10 Aug 1999, GRANTED, Pat. No. US 6541606
Continuation of Ser. No. WO 1999-US9099, filed on 27 Apr 1999, PENDING Continuation of Ser. No. US 1998-224475, filed on 31 Dec 1998, ABANDONED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-83148P	19980427 (60)
	US 1997-70274P	19971231 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FISH & NEAVE, 1251 AVENUE OF THE AMERICAS, 50TH FLOOR, NEW YORK, NY, 10020-1105
NUMBER OF CLAIMS: 187
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 24 Drawing Page(s)
LINE COUNT: 4127
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to methods for the stabilization, storage and delivery of biologically active macromolecules, such as proteins, peptides and nucleic acids. In particular, this invention relates to protein or nucleic acid crystals, formulations and compositions comprising them. Methods are provided for the crystallization of proteins and nucleic acids and for the preparation of stabilized protein or nucleic acid crystals for use in dry or slurry formulations. The present invention is further directed to encapsulating proteins, glycoproteins, enzymes, antibodies, hormones and peptide crystals or crystal formulations into compositions for biological delivery to humans and animals. According to this invention, protein crystals or crystal formulations are encapsulated within a matrix comprising a polymeric carrier to form a composition. The formulations and compositions enhance preservation of the native biologically active tertiary structure of the proteins and create a reservoir which can slowly release active protein where and when it is needed. Methods are provided preparing stabilized formulations using pharmaceutical ingredients or excipients and optionally encapsulating them in a polymeric carrier to produce compositions and using such protein crystal formulations and compositions for biomedical applications, including delivery of therapeutic proteins and vaccines. Additional uses for the protein crystal

formulations and compositions of this invention involve protein delivery in human food, agricultural feeds, veterinary compositions, diagnostics, cosmetics and personal care compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/085.100
INCLS: 424/130.100; 424/085.200; 514/002.000; 424/185.100; 435/189.000; 435/198.000; 435/228.000
NCL NCLM: 424/085.100
NCLS: 424/130.100; 424/085.200; 514/002.000; 424/185.100; 435/189.000; 435/198.000; 435/228.000

L61 ANSWER 2 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2003:238043 USPATFULL
TITLE: 32142, 21481, 25964, 21686, novel human dehydrogenase molecules and uses thereof
INVENTOR(S): Meyers, Rachel, Newton, MA, UNITED STATES
Cook, William James, Natick, MA, UNITED STATES
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003166200	A1	20030904
APPLICATION INFO.:	US 2002-172585	A1	20020614 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-634955, filed on 8 Aug 2000, GRANTED, Pat. No. US 6511834

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-192002P	20000324 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MILLENNIUM PHARMACEUTICALS INC, 75 SIDNEY STREET, CAMBRIDGE, MA, 02139
NUMBER OF CLAIMS: 49
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 29 Drawing Page(s)
LINE COUNT: 6048
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides isolated nucleic acids molecules, designated DHDR nucleic acid molecules, which encode novel DHDR-related dehydrogenase molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing DHDR nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a DHDR gene has been introduced or disrupted. The invention still further provides isolated DHDR proteins, fusion proteins, antigenic peptides and anti-DHDR antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/190.000
INCLS: 435/320.100; 435/325.000; 435/069.100; 536/023.200; 435/006.000
NCL NCLM: 435/190.000
NCLS: 435/320.100; 435/325.000; 435/069.100; 536/023.200;

435/006.000

L61 ANSWER 3 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2003:225742 USPATFULL
TITLE: Protein-protein complexes and methods of using same
INVENTOR(S): Giot, Loic, Madison, CT, UNITED STATES
Eisen, Andrew, Rockville, MD, UNITED STATES
Lewin, David A., New Haven, CT, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003157554	A1	20030821
APPLICATION INFO.:	US 2001-4083	A1	20011030 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-244236P	20001030 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Ivor R. Elrifi, Esq., Mintz, Levin, Cohn, Ferris,, Glovsky and Popeo, P.C., One Financial Center, Boston, MA, 02111
NUMBER OF CLAIMS: 44
EXEMPLARY CLAIM: 1
LINE COUNT: 5186
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides complexes of at least two polypeptides, and methods of using the same. Purified complexes of two polypeptides are provided, including chimeric complexes, and chimeric polypeptides and complexes thereof are also provided, as are nucleic acids encoding chimeric polypeptides and vectors and cells containing the same. Also provided are methods of identifying agents that disrupt polypeptide complexes, methods of identifying complex or polypeptide in a sample, and for removing the same, methods of determining altered expression of a polypeptide in a subject, and methods of treating/preventing disorders involving altered levels of complex or polypeptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/007.100
INCLS: 435/226.000; 435/023.000
NCL NCLM: 435/007.100
NCLS: 435/226.000; 435/023.000

L61 ANSWER 4 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2003:213782 USPATFULL
TITLE: Aspergillus ochraceus 11 alpha hydroxylase and oxidoreductase
INVENTOR(S): Suzanne, Bolten L., Kirkwood, MO, UNITED STATES
Clayton, Robert A., Foristell, MO, UNITED STATES
Easton, Alan M., Maryland Height, MO, UNITED STATES
Engel, Leslie C., Des Pere, MO, UNITED STATES
Messing, Dean M., St. Louis, MO, UNITED STATES
Ng, John S., Oak Park, CA, UNITED STATES
Reitz, Beverly, Chesterfield, MO, UNITED STATES
Walker, Mark C., Chesterfield, MO, UNITED STATES

Wang, Ping T., Manchester, MO, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003148420	A1	20030807
APPLICATION INFO.:	US 2001-21425	A1	20011030 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-244300P	20001030 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PHARMACIA CORPORATION, 800 NORTH LINDBERGH BLVD., MAIL ZONE 04E, ST. LOUIS, MO, 63167
NUMBER OF CLAIMS: 77
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 25 Drawing Page(s)
LINE COUNT: 5967
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a novel cytochrome P450-like enzyme (Aspergillus ochraceus 11 alpha hydroxylase) and an oxidoreductase (Aspergillus ochraceus oxidoreductase) isolated from cDNA library generated from the mRNA of Aspergillus ochraceus spores. When the cDNA encoding the 11 alpha hydroxylase was co-expressed in Spodoptera frugiperda (Sf-9) insect cells with the cDNA encoding human oxidoreductase as an electron donor, it successfully catalyzed the conversion of the steroid substrate 4-androstene-3,17-dione (AD) to 11 alpha-hydroxy-AD as determined by HPLC analysis. The invention also relates to nucleic acid molecules associated with or derived from these cDNAs including complements, homologues and fragments thereof, and methods of using these nucleic acid molecules, to generate, for example, polypeptides and fragments thereof. The invention also relates to the generation of antibodies that recognizes the A. ochraceus 11 alpha hydroxylase and oxidoreductase and methods of using these antibodies to detect the presence of these native and recombinant polypeptides within unmodified and transformed host cells, respectively. The invention also provides methods of expressing the Aspergillus 11 alpha hydroxylase gene separately, or in combination with human or Aspergillus oxidoreductase, in heterologous host cells, to facilitate the bioconversion of steroid substrates to their 11 alpha hydroxy-counterparts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/069.100
INCLS: 435/189.000; 435/320.100; 435/254.200; 536/023.200; 435/060.000; 435/006.000
NCL NCLM: 435/069.100
NCLS: 435/189.000; 435/320.100; 435/254.200; 536/023.200; 435/060.000; 435/006.000

L61 ANSWER 5 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2003:180279 USPATFULL
TITLE: **Human oxidoreductase proteins**
INVENTOR(S): Yue, Henry, Sunnyvale, CA, UNITED STATES
Lal, Preeti, Santa Clara, CA, UNITED STATES
Tang, Y. Tom, San Jose, CA, UNITED STATES

Hillman, Jennifer L., Mountain View, CA, UNITED STATES
Baughn, Mariah R., San Leandro, CA, UNITED STATES
Azimzai, Yalda, Castro Valley, CA, UNITED STATES
Lu, Dyung Aina M., San Jose, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003124106	A1	20030703	
APPLICATION INFO.:	US 2002-168274	A1	20020613	(10)
	WO 2000-US33158		20001207	

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-60172367	19991216

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Incyte Genomics Inc, Legal Department, 3160 Porter Drive, Palo Alto, CA, 94304
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
LINE COUNT: 6886
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides **human oxidoreductase proteins** (ORP) and polynucleotides which identify and encode ORP. The invention also provides expression vectors, host cells, antibodies, agonists, and antagonists. The invention also provides methods for diagnosing, treating, or preventing disorders associated with expression of ORP.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/094.400
INCLS: 435/069.100; 435/189.000; 435/320.100; 435/325.000; 536/023.200
NCL NCLM: 424/094.400
NCLS: 435/069.100; 435/189.000; 435/320.100; 435/325.000; 536/023.200

L61 ANSWER 6 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2003:167779 USPATFULL
TITLE: Genetically engineered duckweed
INVENTOR(S): Stomp, Anne-Marie, Raleigh, NC, UNITED STATES
Rajbhandari, Nirmala, Raleigh, NC, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003115640	A1	20030619	
APPLICATION INFO.:	US 2002-273974	A1	20021018	(10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1999-448105, filed on 23 Nov 1999, PENDING Division of Ser. No. US 1998-132536, filed on 11 Aug 1998, GRANTED, Pat. No. US 6040498			

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-55474P	19970812 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MYERS BIGEL SIBLEY & SAJOVEC, PO BOX 37428, RALEIGH, NC, 27627
NUMBER OF CLAIMS: 60
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 3816
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and compositions for the efficient transformation of duckweed are provided. Preferably, the methods involve transformation by either ballistic bombardment or Agrobacterium. In this manner, any gene or nucleic acid of interest can be introduced and expressed in duckweed plants. Transformed duckweed plants, cells, tissues are also provided. Transformed duckweed plant tissue culture and methods of producing recombinant proteins and peptides from transformed duckweed plants are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 800/288.000
INCLS: 800/295.000
NCL NCLM: 800/288.000
NCLS: 800/295.000

L61 ANSWER 7 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2003:72168 USPATFULL
TITLE: 64 human secreted proteins
INVENTOR(S): Ruben, Steven M., Olney, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Greene, John M., Gaithersburg, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
Feng, Ping, Gaithersburg, MD, UNITED STATES
Florence, Kimberly A., Rockville, MD, UNITED STATES
Hu, Jing-Shan, Mountain View, CA, UNITED STATES
Ferrie, Ann M., Tewksbury, MA, UNITED STATES
Yu, Guo-Liang, Berkeley, CA, UNITED STATES
Duan, Roxanne D., Bethesda, MD, UNITED STATES
Janat, Fouad, Westerly, RI, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003050455	A1	20030313
APPLICATION INFO.:	US 2001-776724	A1	20010206 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-669688, filed on 26 Sep 2000, PENDING Continuation of Ser. No. US 1999-229982, filed on 14 Jan 1999, PENDING Continuation-in-part of Ser. No. WO 1998-US14613, filed on 15 Jul 1998, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-180909P	20000208 (60)
	US 1997-53442P	19970722 (60)
	US 1997-56359P	19970818 (60)
	US 1997-52661P	19970716 (60)
	US 1997-52872P	19970716 (60)
	US 1997-52871P	19970716 (60)
	US 1997-52874P	19970716 (60)

	US 1997-52873P	19970716 (60)
	US 1997-52870P	19970716 (60)
	US 1997-52875P	19970716 (60)
	US 1997-53440P	19970722 (60)
	US 1997-53441P	19970722 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 21934
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 536/023.100
NCL NCLM: 536/023.100

L61 ANSWER 8 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2003:40533 USPATFULL
TITLE: Methods for the inhibition of epstein-barr virus transmission employing anti-viral peptides capable of abrogating viral fusion and transmission
INVENTOR(S): Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6518013	B1	20030211
APPLICATION INFO.:	US 1995-485546		19950607 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994, now patented, Pat. No. US 6017536 Continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994 Continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Scheiner, Laurie
ASSISTANT EXAMINER: Parkin, Jeffrey S.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP, Nelson, M. Bud
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 84 Drawing Figure(s); 83 Drawing Page(s)

LINE COUNT: 24700
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Fusion of the viral envelope, or infected cell membranes with uninfected cell membranes, is an essential step in the viral life cycle. Recent studies involving the human immunodeficiency virus type 1(HIV-1) demonstrated that synthetic peptides (designated DP-107 and DP-178) derived from potential helical regions of the transmembrane (TM) protein, gp41, were potent inhibitors of viral fusion and infection. A computerized antiviral searching technology (C.A.S.T.) that detects related structural motifs (e.g., ALLMOTI 5, 107+178+4, and PLZIP) in other viral proteins was employed to identify similar regions in the Epstein-Barr virus (EBV). Several conserved heptad repeat domains that are predicted to form coiled-coil structures with antiviral activity were identified in the EBV genome. Synthetic peptides of 16 to 39 amino acids derived from these regions were prepared and their antiviral activities assessed in a suitable in vitro screening assay. These peptides proved to be potent inhibitors of EBV fusion. Based upon their structural and functional equivalence to the known HIV-1 inhibitors DP-107 and DP-178, these peptides should provide a novel approach to the development of targeted therapies for the treatment of EBV infections.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/005.000
INCLS: 424/230.100; 530/300.000; 530/324.000; 530/325.000; 530/326.000
NCL NCLM: 435/005.000
NCLS: 424/230.100; 530/300.000; 530/324.000; 530/325.000; 530/326.000

L61 ANSWER 9 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2003:26267 USPATFULL
TITLE: 32142,21481,25964,21686, novel human dehydrogenase molecules and uses therefor
INVENTOR(S): Meyers, Rachel, Newton, MA, United States
Cook, William James, Natick, MA, United States
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6511834	B1	20030128	
APPLICATION INFO.:	US 2000-634955		20000808	(9)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2000-192002P	20000324	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Achutamurthy, Ponnathapu
ASSISTANT EXAMINER: Pak, Yong
LEGAL REPRESENTATIVE: Mandragouras, Esq., Amy E., Zacharakis, Maria Laccotripe, Lahive & Cockfield, LLP
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 6
NUMBER OF DRAWINGS: 29 Drawing Figure(s); 29 Drawing Page(s)
LINE COUNT: 6247

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated nucleic acids molecules, designated DHDR nucleic acid molecules, which encode novel DHDR-related dehydrogenase molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing DHDR nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a DHDR gene has been introduced or disrupted. The invention still further provides isolated DHDR proteins, fusion proteins, antigenic peptides and anti-DHDR antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/190.000
INCLS: 435/252.300; 435/320.100; 536/023.200
NCL NCLM: 435/190.000
NCLS: 435/252.300; 435/320.100; 536/023.200

L61 ANSWER 10 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2002:297296 USPATFULL
TITLE: Methods for inhibition of membrane fusion-associated events, including respiratory syncytial virus transmission
INVENTOR(S): Bolognesi, Dani Paul, Durham, NC, United States
Matthews, Thomas James, Durham, NC, United States
Wild, Carl T., Durham, NC, United States
Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
Langlois, Alphonse J., Durham, NC, United States
PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6479055	B1	20021112
APPLICATION INFO.:	US 1995-470896		19950606 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994, now patented, Pat. No. US 6017536 Continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994 Continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Stucker, Jeffrey
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 44
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 84 Drawing Figure(s); 83 Drawing Page(s)
LINE COUNT: 26553

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to peptides which exhibit potent anti-viral activity. In particular, the invention relates to methods of using such peptides as inhibitory of respiratory syncytial virus ("RSV") transmission to uninfected cells. The peptides used in the methods of the invention are homologs of the

DP-178 and DP-107 peptides, peptides corresponding to amino acid residues 638 to 673, and to amino acid residues 558 to 595, respectively, of the HIV-1.sub.LAI transmembrane protein (TM) gp41.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/211.100
INCLS: 424/186.100; 530/324.000
NCL NCLM: 424/211.100
NCLS: 424/186.100; 530/324.000

L61 ANSWER 11 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2002:99136 USPATFULL
TITLE: 32142, 21481,25964, 21686, novel human dehydrogenase molecules and uses therefor
INVENTOR(S): Meyers, Rachel, Newton, MA, UNITED STATES
Cook, William James, New London, NH, UNITED STATES
Williamson, Mark, Saugus, MA, UNITED STATES
Rudolph-Owen, Laura A., Jamaica Plain, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002052032	A1	20020502
	US 6613555	B2	20030902
APPLICATION INFO.:	US 2001-816760	A1	20010323 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-634955, filed on 8 Aug 2000, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-192002P	20000324 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
NUMBER OF CLAIMS: 42
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 38 Drawing Page(s)
LINE COUNT: 5938
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides isolated nucleic acids molecules, designated DHDR nucleic acid molecules, which encode novel DHDR-related dehydrogenase molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing DHDR nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a DHDR gene has been introduced or disrupted. The invention still further provides isolated DHDR proteins, fusion proteins, antigenic peptides and anti-DHDR antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/190.000
INCLS: 435/069.100; 435/325.000; 435/320.100; 536/023.200
NCL NCLM: 435/190.000
NCLS: 435/004.000; 435/026.000; 435/243.000; 435/254.100;

435/325.000; 514/789.000; 536/023.200

L61 ANSWER 12 OF 15 USPATFULL on STN

ACCESSION NUMBER:	2002:85540 USPATFULL
TITLE:	STABILIZED PROTEIN CRYSTALS FORMULATIONS CONTAINING THEM AND METHODS OF MAKING THEM
INVENTOR(S):	MARGOLIN, ALEXEY L., NEWTON, MA, UNITED STATES KHALAF, NAZAR K., WORCESTER, MA, UNITED STATES CLAIR, NANCY L. ST., ANN ARBOR, MI, UNITED STATES RAKESTRAW, SCOTT L., NEWARK, DE, UNITED STATES SHENOY, BHAMI C., WOBURN, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002045582	A1	20020418
	US 6541606	B2	20030401
APPLICATION INFO.:	US 1999-374132	A1	19990810 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. WO 1999-US9099, filed on 27 Apr 1999, UNKNOWN Continuation-in-part of Ser. No. US 1998-224475, filed on 31 Dec 1998, ABANDONED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-83148P	19980427 (60)
	US 1997-70274P	19971231 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	MARGARET A PIERRI, FISH & NEAVE, 1251 AVENUE OF THE AMERICAS, NEW YORK, NY, 100201104
NUMBER OF CLAIMS:	187
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	24 Drawing Page(s)
LINE COUNT:	4131

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to methods for the stabilization, storage and delivery of biologically active macromolecules, such as proteins, peptides and nucleic acids. In particular, this invention relates to protein or nucleic acid crystals, formulations and compositions comprising them. Methods are provided for the crystallization of proteins and nucleic acids and for the preparation of stabilized protein or nucleic acid crystals for use in dry or slurry formulations. The present invention is further directed to encapsulating proteins, glycoproteins, enzymes, antibodies, hormones and peptide crystals or crystal formulations into compositions for biological delivery to humans and animals. According to this invention, protein crystals or crystal formulations are encapsulated within a matrix comprising a polymeric carrier to form a composition. The formulations and compositions enhance preservation of the native biologically active tertiary structure of the proteins and create a reservoir which can slowly release active protein where and when it is needed. Methods are provided preparing stabilized formulations using pharmaceutical ingredients or excipients and optionally encapsulating them in a polymeric carrier to produce compositions and using such protein crystal formulations and compositions for biomedical applications, including delivery of therapeutic proteins and vaccines. Additional uses for the protein crystal

formulations and compositions of this invention involve protein delivery in human food, agricultural feeds, veterinary compositions, diagnostics, cosmetics and personal care compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 514/021.000
INCLS: 424/085.100; 514/002.000; 424/198.100; 435/183.000; 424/186.100; 514/044.000; 536/023.100; 536/023.500; 530/387.100; 530/362.000; 424/426.000; 424/400.000; 424/190.100
NCL NCLM: 530/350.000
NCLS: 424/094.100; 424/094.200; 424/094.500; 424/094.600; 424/489.000; 424/501.000; 435/039.000; 435/174.000; 435/178.000; 435/181.000; 435/183.000; 435/188.000; 530/402.000; 530/403.000; 530/813.000; 530/815.000

L61 ANSWER 13 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2002:78714 USPATFULL
TITLE: 32142, 21481, 25964, 21686, novel dehydrogenase molecules and uses therefor
INVENTOR(S): Meyers, Rachel, Newton, MA, UNITED STATES
Cook, William James, New London, NH, UNITED STATES
Williamson, Mark, Saugus, MA, UNITED STATES
Rudolph-Owen, Laura A., Jamaica Plain, MA, UNITED STATES
Gimeno, Ruth, Wellesley, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002042371	A1	20020411
	US 6627423	B2	20030930
APPLICATION INFO.:	US 2001-838561	A1	20010418 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-816760, filed on 23 Mar 2001, PENDING
Continuation-in-part of Ser. No. US 2000-634955, filed on 8 Aug 2000, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-192002P	20000324 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
NUMBER OF CLAIMS: 42
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 44 Drawing Page(s)
LINE COUNT: 6183
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides isolated nucleic acids molecules, designated DHDR nucleic acid molecules, which encode novel DHDR-related dehydrogenase molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing DHDR nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a DHDR gene has been introduced or disrupted. The

invention still further provides isolated DHDR proteins, fusion proteins, antigenic peptides and anti-DHDR antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 514/012.000
INCLS: 530/350.000; 536/023.500; 435/069.100; 435/325.000; 435/320.100
NCL NCLM: 435/190.000
NCLS: 435/071.100; 435/252.300; 435/320.100; 435/440.000; 536/023.200

L61 ANSWER 14 OF 15 USPATFULL on STN
ACCESSION NUMBER: 2001:67794 USPATFULL
TITLE: Human respiratory syncytial virus peptides with antifusogenic and antiviral activities
INVENTOR(S): Barney, Shawn O'Lin, Cary, NC, United States
Lambert, Dennis Michael, Cary, NC, United States
Petteway, Stephen Robert, Cary, NC, United States
PATENT ASSIGNEE(S): Trimeris, Inc., Durham, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6228983	B1	20010508
APPLICATION INFO.:	US 1995-485264		19950607 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-470896, filed on 6 Jun 1995 Continuation-in-part of Ser. No. US 1994-360107, filed on 20 Dec 1994 Continuation-in-part of Ser. No. US 1994-255208, filed on 7 Jun 1994 Continuation-in-part of Ser. No. US 1993-73028, filed on 7 Jun 1993, now patented, Pat. No. US 5464933
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Scheiner, Laurie
ASSISTANT EXAMINER: Parkin, Jeffrey S.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 62
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 84 Drawing Figure(s); 83 Drawing Page(s)
LINE COUNT: 32166
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to peptides which exhibit antifusogenic and antiviral activities. The peptides of the invention consist of a 16 to 39 amino acid region of a human respiratory syncytial virus protein. These regions were identified through computer algorithms capable of recognizing the ALLMOTI5, 107x178x4, or PLZIP amino acid motifs. These motifs are associated with the antifusogenic and antiviral activities of the claimed peptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 530/300.000
INCLS: 530/324.000; 530/325.000; 530/326.000; 424/211.100; 424/186.100
NCL NCLM: 530/300.000
NCLS: 424/186.100; 424/211.100; 530/324.000; 530/325.000;

530/326.000

L61 ANSWER 15 OF 15 USPATFULL on STN

ACCESSION NUMBER:	2000:34742 USPATFULL
TITLE:	Genetically engineered duckweed
INVENTOR(S):	Stomp, Anne-Marie, Raleigh, NC, United States Rajbhandari, Nirmala, Raleigh, NC, United States
PATENT ASSIGNEE(S):	North Caroline State University, Raleigh, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6040498		20000321	
APPLICATION INFO.:	US 1998-132536		19980811	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-55474P	19970812 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Benzion, Gary
ASSISTANT EXAMINER:	Mehta, Ashwin D.
LEGAL REPRESENTATIVE:	Myers Bigel Sibley & Sajovec, P.A.
NUMBER OF CLAIMS:	65
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT:	3839

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and compositions for the efficient transformation of duckweed are provided. Preferably, the methods involve transformation by either ballistic bombardment or Agrobacterium. In this manner, any gene or nucleic acid of interest can be introduced and expressed in duckweed plants. Transformed duckweed plants, cells, tissues are also provided. Transformed duckweed plant tissue culture and methods of producing recombinant proteins and peptides from transformed duckweed plants are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL	INCLM:	800/294.000
	INCLS:	435/419.000; 435/469.000; 435/069.400; 435/069.510; 435/069.600; 435/070.210; 800/295.000; 800/300.000
NCL	NCLM:	800/294.000
	NCLS:	435/069.400; 435/069.510; 435/069.600; 435/070.210; 435/419.000; 435/469.000; 800/295.000; 800/300.000

(FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, USPATFULL' ENTERED AT 12:35:52 ON 16 DEC 2003)

L62	1167	SEA ABB=ON	PLU=ON	"BANDMAN O"?/AU
L63	2913	SEA ABB=ON	PLU=ON	"HILLMAN J"?/AU
L64	12459	SEA ABB=ON	PLU=ON	"TANG Y"?/AU
L65	1255	SEA ABB=ON	PLU=ON	"CORLEY N"?/AU
L66	867	SEA ABB=ON	PLU=ON	"GUEGLER K"?/AU
L67	289	SEA ABB=ON	PLU=ON	"GORGONE G"?/AU
L68	820	SEA ABB=ON	PLU=ON	"BAUGHN M"?/AU
L69	15	SEA ABB=ON	PLU=ON	L62 AND L63 AND L64 AND L65 AND L66 AND L67 AND L68
L70	778	SEA ABB=ON	PLU=ON	L62 AND (L63 OR L64 OR L65 OR L66 OR L67 OR L68)

- Author (s)

Searcher : Shears 308-4994

L71	783	SEA ABB=ON	PLU=ON	L63 AND (L64 OR L65 OR L66 OR L67 OR L68)
L72	674	SEA ABB=ON	PLU=ON	L64 AND (L65 OR L66 OR L67 OR L68)
L73	579	SEA ABB=ON	PLU=ON	L65 AND (L66 OR L67 OR L68)
L74	214	SEA ABB=ON	PLU=ON	L66 AND (L67 OR L68)
L75	60	SEA ABB=ON	PLU=ON	L67 AND L68
L76	5	SEA ABB=ON	PLU=ON	(L70 OR L71 OR L72 OR L73 OR L74 OR L75) AND L57
L77	18	SEA ABB=ON	PLU=ON	L69 OR L76
L78	11	DUP REM L77	(7 DUPLICATES REMOVED)	

L78 ANSWER 1 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2003:180279 USPATFULL
TITLE: **Human oxidoreductase proteins**
INVENTOR(S): Yue, Henry, Sunnyvale, CA, UNITED STATES
Lal, Preeti, Santa Clara, CA, UNITED STATES
Tang, Y. Tom, San Jose, CA, UNITED STATES
Hillman, Jennifer L., Mountain View, CA, UNITED STATES
Baughn, Mariah R., San Leandro, CA, UNITED STATES
Azimzai, Yalda, Castro Valley, CA, UNITED STATES
Lu, Dyung Aina M., San Jose, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003124106	A1	20030703	
APPLICATION INFO.:	US 2002-168274	A1	20020613	(10)
	WO 2000-US33158		20001207	

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-60172367	19991216

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Incyte Genomics Inc, Legal Department, 3160 Porter Drive, Palo Alto, CA, 94304
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
LINE COUNT: 6886
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides **human oxidoreductase proteins** (ORP) and polynucleotides which identify and encode ORP. The invention also provides expression vectors, host cells, antibodies, agonists, and antagonists. The invention also provides methods for diagnosing, treating, or preventing disorders associated with expression of ORP.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L78 ANSWER 2 OF 11 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-390245 [41] WPIDS
DOC. NO. CPI: C2001-118897
TITLE: Novel **human oxidoreductase protein** (ORP) useful for diagnosing, treating and preventing cell proliferative,

neurological, viral, reproductive and autoimmune/inflammatory disorders associated with abnormal expression of ORP.

DERWENT CLASS: B04 D16

INVENTOR(S): AZIMZAI, Y; **BAUGHN, M R; HILLMAN, J L;** LAL, P; LU, D A M; **TANG, Y T;** YUE, H

PATENT ASSIGNEE(S): (INCY-N) INCYTE GENOMICS INC; (AZIM-I) AZIMZAI Y; (BAUG-I) BAUGHN M R; (HILL-I) HILLMAN J L; (LALP-I) LAL P; (LUDA-I) LU D A M; (TANG-I) TANG Y T; (YUEH-I) YUE H

COUNTRY COUNT: 95

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001044448	A2	20010621	(200141)*	EN	136
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001020675	A	20010625	(200162)		
EP 1242583	A2	20020925	(200271)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
JP 2003516750	W	20030520	(200334)		181
US 2003124106	A1	20030703	(200345)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001044448	A2	WO 2000-US33158	20001207
AU 2001020675	A	AU 2001-20675	20001207
EP 1242583	A2	EP 2000-983992	20001207
		WO 2000-US33158	20001207
JP 2003516750	W	WO 2000-US33158	20001207
		JP 2001-545526	20001207
US 2003124106	A1	WO 2000-US33158	20001207
		US 2002-168274	20020613

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2001020675	A	Based on	WO 2001044448
EP 1242583	A2	Based on	WO 2001044448
JP 2003516750	W	Based on	WO 2001044448

PRIORITY APPLN. INFO: US 1999-172367P 19991216

AN 2001-390245 [41] WPIDS

AB WO 200144448 A UPAB: 20010724

NOVELTY - Isolated **human oxidoreductase proteins** (I) (referred as ORP 1-27) having defined sequence (PS) of 468, 254, 555, 337, 109, 385, 312, 160, 487, 524, 144, 373,

305, 500, 369, 145, 255, 246, 467, 317, 181, 360, 476, 621, 245, 159 or 291 amino acids (aa) given in specification, a naturally occurring aa sequence having 90% sequence identity to PS, or biologically active or immunogenic fragment of PS, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) isolated polynucleotide (II) encoding (I). (II) comprises a defined sequence of 1557, 1106, 2180, 1311, 921, 2032, 1134, 734, 2221, 1706, 549, 1363, 1196, 1926, 1727, 611, 1352, 1458, 1884, 1400, 1313, 1459, 2101, 2440, 1072, 1040 (S28-S53) or 1624 (S54) nucleotides given in the specification, is a naturally occurring polynucleotide sequence having 70% identity to the above mentioned polynucleotide sequences, a polynucleotide sequence which is complementary to the above sequences, or is an RNA equivalent of the above sequences;

(2) recombinant polynucleotide (III) comprising a promoter sequence operably linked to (II);

(3) cell (IV) transformed with (III);

(4) transgenic organism comprising (III);

(5) preparation of (I);

(6) isolated antibody that specifically binds to (I);

(7) detecting a target polynucleotide in a sample which comprises a sequence of (II) comprising hybridizing the sample with a probe containing at least 20 contiguous nucleotides which is complementary to the target polynucleotide in the sample and which specifically hybridizes to the target polynucleotide, under conditions where a hybridization complex forms between the probe and the target polynucleotide or its fragments, and then detecting the presence/absence of the hybridization complex, and, optionally, amount of the target polynucleotide is also quantitated. Alternately, method is carried out by amplifying target polynucleotide or its fragments by polymerase chain reaction (PCR) and then detecting the presence/absence of the target polynucleotide or its fragment;

(8) isolated polynucleotide comprising 60 contiguous nucleotides of (II);

(9) screening a compound for effectiveness as an agonist or antagonist of (I) comprising exposing a sample containing (I) to a compound and detecting agonist or antagonist activity in the sample;

(10) screening for a compound that specifically binds to (I) comprising combining (I) with a test compound under suitable conditions and then detecting binding of (I) to the test compound;

(11) screening for a compound that modulates the activity of (I) comprising combining (I) with a test compound under conditions permissive for the activity of (I), assessing the activity of (I) in the presence of the test compound and then comparing the activity of (I) in the presence and absence of the test compound, change in the activity of (I) in the presence of the test compound is indicative of a compound that modulates the activity of (I); and

(12) screening a compound for effectiveness in altering expression of a target polynucleotide which comprises a sequence of (S28)-(S53) or (S54) comprising exposing the sample containing the target polynucleotide to a compound, under conditions suitable for the expression of the target polynucleotide and comparing expression in the presence of varying amounts and in the absence of the compound.

ACTIVITY - Antiarteriosclerotic; antiinflammatory; antipsoriatic; cytostatic; hepatotrophic; anticoagulant;

thrombolytic; antithyroid; immunosuppressive; antidiabetic; antiinfertility; gynecological; depilatory; osteopathic; antilipemic; anorectic; vasotropic; anticonvulsive; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; tranquilizer; neuroleptic; anti-HIV; dermatological; antiallergic; antianemic; antiasthmatic; nephrotophic; antigout; antiarthritic; antirheumatic; ophthalmological; antiviral; antibacterial; antiulcer. No supporting data is given.

MECHANISM OF ACTION - ORP expression or activity modulators; gene therapy.

USE - (I) is useful for identifying compounds that bind to (I) or which modulate activity of (I). (II) is useful for assessing toxicity of a test compound (claimed).

(I) and (II) are useful for diagnosing, treating or preventing cell proliferative disorders such as actinic keratosis, arteriosclerosis, atherosclerosis, bursitis, cirrhosis, hepatitis, psoriasis, mixed connective tissue disease (MCTD), myelofibrosis, a cancer; endocrine disorders such as hypophysectomy, aneurysms, thrombosis, diabetes insipidus, sarcoidosis, giantism, goiter, myxedema, autoimmune thyroiditis (Hashimoto's disease), Grave's disease, Type I or Type II mellitus, hyperplasia, amyloidosis, Cushing's disease, Addison's disease, infertility, endometriosis, amenorrhea, galactorrhea, hirsutism, breast cancer, osteoporosis, and syndrome of 5 alpha -reductase; metabolic disorders such as Addison's disease, cystic fibrosis, diabetes, hypercholesterolemia, obesity or phenylketonuria; reproductive disorders such as infertility, ovulatory defects, disruptions of the menstrual cycle, endometrial and ovarian tumors; neurological disorders such as epilepsy, stroke, Alzheimer's disease, Huntington's disease, Parkinson's disease, bacterial and viral meningitis, brain abscess, Creutzfeldt-jakob disease, cerebral palsy, autonomic nervous system disorders, cranial nerve disorders, spinal cord diseases, muscular dystrophy and other neuromuscular disorders, anxiety, amnesia, and schizophrenic disorders; viral disorders; and autoimmune/inflammatory disorders such as acquired immunodeficiency syndrome (AIDS), Addison's disease, adult respiratory distress syndrome, allergies, amyloidosis, anemia, asthma, autoimmune hemolytic anemia, autoimmune thyroiditis, autoimmune polyendocrinopathy and Crohn's disease, atopic dermatitis, Goodpasture's syndrome, gout, multiple sclerosis, osteoarthritis, osteoporosis, psoriasis, rheumatoid arthritis or ulcerative colitis. (II) is useful to detect upstream sequences such as promoters and regulatory elements. (II) is useful for creating knock out or knock in humanized animals or transgenic animals to model human disease. (II) is useful for somatic or germline gene therapy for treating the above mentioned disorders. Oligonucleotide primers derived from (II) may be used to detect single nucleotide polymorphisms and for mapping the naturally occurring genomic sequences. (II) is useful for generating a transcript image of a tissue or cell type.

(I), its catalytic or immunogenic fragments are useful for screening libraries of compounds in several drug screening assays.

A vector encoding (I) or its fragments is also useful for treating the above mentioned disorders. Antibodies which bind to (I) may be used for diagnosis of disorders characterized by expression of (I) or in assays to monitor patients being treated with ORP or agonists, antagonists or inhibitors of ORP and for assessing toxicity of a test compound.

Dwg.0/0

L78 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2000:241516 HCAPLUS
DOCUMENT NUMBER: 132:261406
TITLE: Protein and cDNA sequences encoding human oxidoreductase homologs, and uses thereof in diagnostic and therapeutic applications
INVENTOR(S): Lal, Preeti; **Guegler, Karl J.**; **Gorgone, Gina A.**; **Corley, Neil C.**; **Baughn, Mariah R.**; **Tang, Y. Tom**; **Hillman, Jennifer L.**; **Bandman, Olga**; Azimzai, Yalda; Au-young, Janice; Yue, Henry; Lu, Dyung Aina M.; Yang, Junming
PATENT ASSIGNEE(S): Incyte Pharmaceuticals, Inc., USA; et al.
SOURCE: PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000020604	A2	20000413	WO 1999-US23434	19991006
WO 2000020604	A3	20000810		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, CA, CH, CN, CU, DE, DK, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, LT, LU, LV, MD, SE, SG, TD, TG				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, GA, GN, ML, MR, SN, TD, TG				
CA 2344973	AA	20000413	CA 1999-2344973	19991006
AU 9962953	A1	20000425	AU 1999-62953	19991006
EP 1119629	A2	20010801	EP 1999-950258	19991006
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2003521871	T2	20030722	JP 2000-574699	19991006

PRIORITY APPLN. INFO.:
US 1998-172227P P 19981006
US 1998-155202P P 19981202
US 1999-123911P P 19990310
WO 1999-US23434 W 19991006

AB The invention provides protein and cDNA sequences for fifteen human proteins (OXREs) that share homol. with various oxidoreductases. The OXREs of the invention were first identified as Incyte clones from human tissue cDNA libraries using a computer search for amino acid sequence alignments; consensus sequences were derived from overlapping and/or extended nucleic acid sequences. The invention also provides expression vectors, host cells, agonists, antibodies and antagonists. The invention also provides methods for the diagnosis, treatment, and prevention of disorders associated with expression of OXREs, including cell proliferative disorders.

L78 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2000:145024 HCAPLUS
DOCUMENT NUMBER: 132:204042
TITLE: Identification of human RNA-associated proteins and cloning of cDNAs encoding them
INVENTOR(S): **Hillman, Jennifer L.**; Yue, Henry;

Tang, Y. Tom; Corley, Neil C.; Guegler, Karl J.; Gorgone, Gina A.; Patterson, Chandra; **Baughn, Mariah R.**; Lal, Preeti; **Bandman, Olga**; Reddy, Roopa; Azimzai, Yalda; Shih, Leo L.; Yang, Junming; Lu, Dyung Aina M.

PATENT ASSIGNEE(S): Incyte Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 123 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000011171	A2	20000302	WO 1999-US19361	19990820
WO 2000011171	A3	20000727		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2340277	AA	20000302	CA 1999-2340277	19990820
AU 9956903	A1	20000314	AU 1999-56903	19990820
EP 1109903	A2	20010627	EP 1999-943897	19990820
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002523045	T2	20020730	JP 2000-566425	19990820

PRIORITY APPLN. INFO.:

US 1998-97550P	P	19980821
US 1999-115639P	P	19990112
US 1998-115639P	P	19990112
WO 1999-US19361	W	19990820

AB The invention provides human RNA-associated proteins (RNAAP) and polynucleotides which identify and encode RNAAP. The invention also provides expression vectors, host cells, antibodies, agonists, and antagonists. The invention also provides methods for diagnosing, treating, or preventing disorders associated with the expression of RNAAP.

L78 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 2000:98758 HCAPLUS
DOCUMENT NUMBER: 132:148500
TITLE: Cloning of human phosphorylation effectors, their encoding cDNA sequences, and their diagnostic and therapeutic uses
INVENTOR(S): **Hillman, Jennifer L.**; Lal, Preeti; **Tang, Y. Tom; Corley, Neil C.; Guegler, Karl J.; Baughn, Mariah R.**; Patterson, Chandra; **Bandman, Olga**; Au-Young, Janice; **Gorgone, Gina A.**; Yue, Henry; Azimzai, Yalda; Reddy, Roopa; Lu, Dyungaina M.; Shih, Leo L.
PATENT ASSIGNEE(S): Incyte Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 142 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000006728	A2	20000210	WO 1999-US17132	19990728
WO 2000006728	A3	20000504		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2335644	AA	20000210	CA 1999-2335644	19990728
AU 9951349	A1	20000221	AU 1999-51349	19990728
EP 1100904	A2	20010523	EP 1999-935987	19990728
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002526035	T2	20020820	JP 2000-562510	19990728

PRIORITY APPLN. INFO.:

US 1998-123494	A	19980728
US 1998-155213P	P	19980728
US 1998-152814	A	19980914
US 1998-155196P	P	19980914
US 1998-155239P	P	19981014
US 1998-173482	A	19981014
US 1998-106889P	P	19981103
US 1998-109093P	P	19981119
US 1998-113796P	P	19981222
US 1999-155233P	P	19990112
US 1999-229005	A	19990112
WO 1999-US17132	W	19990728

AB The invention provides 31 human phosphorylation effectors (PHSP) and polynucleotides which identify and encode PHSP, which possess signature sequences homologous to those of known protein kinases and protein phosphatases. The invention also provides expression vectors, host cells, antibodies, agonists, and antagonists. The invention also provides for the uses of these sequences methods for diagnosing, treating, or preventing cell proliferative, immune, and neuronal disorders. Putative phosphorylation and glycosylation sites, tissue-specific expression patterns, and diseases associated with each of the sequences are also provided.

L78 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 4
ACCESSION NUMBER: 2000:15385 HCAPLUS
DOCUMENT NUMBER: 132:74554
TITLE: Protein and cDNA sequences encoding six **human oxidoreductase proteins**, and uses thereof in therapeutic and diagnostic applications
INVENTOR(S): **Bandman, Olga; Hillman, Jennifer L.; Tang, Y. Tom**; Lal, Preeti;

	Corley, Neil C.; Guegler, Karl J.; Gorgone, Gina A.; Baughn, Mariah R.
PATENT ASSIGNEE(S):	Incyte Pharmaceuticals, Inc., USA
SOURCE:	PCT Int. Appl., 88 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000000622	A2	20000106	WO 1999-US14711	19990629
WO 2000000622	A3	20000420		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9948437	A1	20000117	AU 1999-48437	19990629
EP 1092032	A2	20010418	EP 1999-932044	19990629
R: BE, DE, ES, FR, GB, IT, NL				
JP 2002519034	T2	20020702	JP 2000-557375	19990629

PRIORITY APPLN. INFO.:			
US 1998-91177P	P	19980630
US 1998-155241	A2	19980716
US 1998-91177	P	19980630
US 1998-155241P	P	19980716
WO 1999-US14711	W	19990629

AB The invention provides protein and cDNA sequences for six **human oxidoreductase proteins** (**HORPs**). **HORPs** were first identified in Incyte clones 321510, 634343, 1942326, 2395269, 008879, and 2274011 from **human** tissue cDNA libraries using a computer search for amino acid sequence alignments; consensus sequences were derived from overlapping and/or extended nucleic acid sequences. The invention also provides expression vectors, host cells, agonists, antibodies and antagonists. The invention also relates to the use of the provided proteins/genes in the diagnosis, treatment, and prevention of various disorders associated with HORP expression.

L78 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 5

ACCESSION NUMBER:	2000:15363 HCAPLUS
DOCUMENT NUMBER:	132:74549
TITLE:	Human signal peptide-containing proteins and their cDNA sequences
INVENTOR(S):	Lal, Preeti; **Tang, Y. Tom; Gorgone, Gina A.; Corley, Neil C.; Guegler, Karl J.; Baughn, Mariah R.**; Akerblom, Ingrid E.; Au-Young, Janice; Yue, Henry; Patterson, Chandra; Reddy, Roopa; **Hillman, Jennifer L.; Bandman, Olga**
PATENT ASSIGNEE(S):	Incyte Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 327 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000000610	A2	20000106	WO 1999-US14484	19990625
WO 2000000610	A3	20000629		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9948349	A1	20000117	AU 1999-48349	19990625
EP 1090118	A2	20010411	EP 1999-931942	19990625
R: BE, DE, ES, FR, GB, IT, NL				
JP 2002519030	T2	20020702	JP 2000-557363	19990625

PRIORITY APPLN. INFO.:

US 1998-90762P	P	19980626
US 1998-94983P	P	19980731
US 1998-102686P	P	19981001
US 1998-112129P	P	19981211
US 1998-90762	P	19980626
US 1998-94983	P	19980731
US 1998-102686	P	19981001
US 1998-112129	P	19981211
WO 1999-US14484	W	19990625

AB The invention provides 134 human signal peptide-containing proteins (HSPP) and polynucleotides which identify and encode HSPP. Tissue-specific expression patterns are also provided. Biol. activity of HSPP-68 (potassium current using voltage clamp anal.) and HSPP-92 (protein phosphatase measured by the hydrolysis of p-nitrophenyl phosphate) was demonstrated, and the HSPP proteins in general are expected to have useful activities. The invention also provides expression vectors, host cells, antibodies, agonists, and antagonists. The invention also provides methods for diagnosing, treating, or preventing disorders associated with expression of HSPP.

L78 ANSWER 8 OF 11 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-025146 [03] WPIDS
CROSS REFERENCE: 2000-602121 [57]; 2001-025334 [03]; 2001-041141 [05]
DOC. NO. CPI: C2001-007759
TITLE: New **human oxidoreductase proteins** useful for diagnosing, treating or preventing proliferative, neurological, genetic, smooth muscle, autoimmune or inflammatory disorders associated with abnormal expression of oxidoreductase proteins.
DERWENT CLASS: B04 D16
INVENTOR(S): **BAUGHN, M R**; LU, D A M; **TANG, Y T**; YUE, H

PATENT ASSIGNEE(S): (INCY-N) INCYTE GENOMICS INC
COUNTRY COUNT: 89
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000071679	A2	20001130	(200103)*	EN	94
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW					
AU 2000050342	A	20001212	(200115)		
AU 2000050482	A	20001218	(200118)		
EP 1183370	A2	20020306	(200224)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
JP 2003517288	W	20030527	(200344)		145

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000071679	A2	WO 2000-US13879	20000519
AU 2000050342	A	AU 2000-50342	20000519
AU 2000050482	A	AU 2000-50482	20000526
EP 1183370	A2	EP 2000-932647	20000519
		WO 2000-US13879	20000519
JP 2003517288	W	JP 2000-620057	20000519
		WO 2000-US13879	20000519

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000050342	A	Based on	WO 2000071679
AU 2000050482	A	Based on	WO 2000073334
EP 1183370	A2	Based on	WO 2000071679
JP 2003517288	W	Based on	WO 2000071679

PRIORITY APPLN. INFO: US 1999-136740P 19990527; US 1999-135049P 19990520; US 1999-139566P 19990616

AN 2001-025146 [03] WPIDS

CR 2000-602121 [57]; 2001-025334 [03]; 2001-041141 [05]

AB WO 200071679 A UPAB: 20030710

NOVELTY - An isolated **human oxidoreductase protein** (I) (OXRD-1 to OXRD-8) comprising a fully defined sequence of 244 (S1), 429 (S2), 237 (S3), 157 (S4), 300 (S5), 377 (S6), 95 (S7) and 563 (S8) amino acids as given in the specification, a naturally occurring amino acid sequence at least 90% identical to (S1-S8), or a biologically active or immunogenic fragment of (S1-S8), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an isolated polynucleotide (II) encoding (I) with a fully defined polynucleotide sequence of 1678 (S9), 1494 (S10), 1053 (S11), 979 (S12), 1010 (S13), 3021 (S14), 714 (S15) and 2519 (S16)

base pairs as given in the specification, a polynucleotide sequence 90% identical to (S9-S16), polynucleotide sequences complementary to (II) and RNA equivalents;

(2) a recombinant polynucleotide (III) comprising a promoter sequence operably linked to (II);

(3) a cell (IV) transformed with (III);

(4) a transgenic organism comprising (III);

(5) producing (I) by culturing (IV) and recovering the polypeptide expressed;

(6) an isolated antibody that specifically binds to (I);

(7) detecting (II) in a sample comprises:

(a) hybridizing the sample with a complementary probe comprising at least 20 contiguous nucleotides and detecting the presence or absence of the hybridization complex, and, optionally, if present the amount of the target polynucleotide is also quantitated; or

(b) amplifying (I) or its fragments by polymerase chain reaction (PCR) and then detecting the presence or absence of the amplified polynucleotide or its fragment;

(8) an isolated polynucleotide comprising 60 contiguous nucleotides of (II);

(9) screening a compound for effectiveness as an agonist or antagonist of (I) involves exposing a sample comprising (I) to a compound and detecting agonist or antagonist activity in the sample;

(10) screening for a compound that specifically binds to (I) involves combining (I) with a test compound under suitable conditions and then detecting binding of (I) to the test compound;

(11) screening for a compound that modulates for the activity of (I) involves combining (I) with a test compound, assessing the activity of (I) in the presence of the test compound in comparison to the activity of (I) in the absence of the test compound. A change in the activity of (I) in the presence of the test compound is indicative of a compound that modulates the activity of (I); and

(12) screening a compound for effectiveness in altering expression of (I) involves exposing a sample comprising (I) and then detecting altered expression of (I).

ACTIVITY - Antiarteriosclerotic; antiatherosclerotic; antiinflammatory; antiviral; cytostatic; anticonvulsant; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; antibacterial; antianginal; antiasthmatic; antiarrhythmic; immunosuppressive; hypotensive; hyperglycemic; cardiant; anti-HIV; antiallergic; antianemic; antithyroid; antipsoriotic; antiarthritic; antirheumatoid; antiulcer. No supporting data is given.

MECHANISM OF ACTION - OXRD expression or activity modulators; gene therapy.

USE - The pharmaceutical compositions comprising (I) or an agonist of (I) is useful for treating a disease or condition associated with decreased expression of functional OXRD. The pharmaceutical composition comprising the antagonist of (I) is useful for treating a disease or condition associated with overexpression of (I) (claimed). Polynucleotides encoding (I) or their mammalian homologs are useful for creating knock out or knock in humanized animals or transgenic animals to model human disease. (I) is useful for treating a proliferative, neurological, genetic, smooth muscle and autoimmune/inflammatory disorders such as cell proliferative disorder such as actinic keratosis, arteriosclerosis, atherosclerosis, bursitis, cirrhosis, hepatitis, mixed connective tissue disease (MCTD), myelofibrosis etc., cancers including

adenocarcinoma, leukemia, lymphoma, melanoma etc., a neurological disorder such as epilepsy, stroke, Alzheimer's disease, Pick's disease, Huntington's disease, Parkinson's disease etc., bacterial and viral meningitis, brain abscess, autonomic nervous system disorders, cranial nerve disorders, spinal cord diseases, muscular dystrophy and other neuromuscular disorders, peripheral nervous system disorders, dermatomyositis and polymyositis, inherited, metabolic, endocrine, and toxic myopathies, myasthenia gravis, periodic paralysis, mental disorders, smooth muscle disorder such as angina, anaphylactic shock, cardiovascular shock, Cushing's syndrome, hypertension, hypoglycemia, myocardial infraction and an autoimmune/inflammatory disorder such as acquired immuno deficiency syndrome (AIDS), Addison's disease, adult respiratory distress syndrome, allergies, amyloidosis, anemia, asthma, autoimmune hemolytic anemia, autoimmune thyroiditis, autoimmune polyendocrinopathy and Crohn's disease, psoriasis, rheumatoid arthritis or ulcerative colitis. A vector encoding (I) or its fragments is also useful for treating the above mentioned disorders. (II) is useful for somatic or germline gene therapy for treating the above mentioned disorders. Antibodies which bind to (I) may be used for diagnosis of disorders characterized by expression of (I) or in assays to monitor patients being treated with OXRD or agonists, antagonists or inhibitors of OXRD. The polynucleotides encoding (I) may also be used for diagnostic purposes to determine absence, presence and excess expression of (I), and to monitor regulation of OXRD levels during therapeutic intervention. They are also used for the diagnosis of the above mentioned disorders associated with (I). The nucleotide sequences encoding (I) may be used in assays for detecting the presence of the associated disorders as mentioned above. Oligonucleotide primers derived from (II) may be used to detect single nucleotide polymorphisms. (II) may also be used for generating hybridization probes useful in mapping the naturally occurring genomic sequences. (I), its catalytic or immunogenic fragments are useful for screening libraries of compounds in several drug screening assays.
Dwg.0/0

L78 ANSWER 9 OF 11 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2000-256643 [22] WPIDS
DOC. NO. CPI: C2000-078314
TITLE: Novel human membrane channel protein and polynucleotide useful for diagnosing and treating cell proliferative, inflammatory, secretory, osmoregulatory, muscular, cardiovascular and neurological disorders.
DERWENT CLASS: B04 D16
INVENTOR(S): AU-YOUNG, J; AZIMZAI, Y; **BANDMAN, O**; **BAUGHN, M R**; **CORLEY, N C**; **GORGONE, G**; **GUEGLER, K J**; **HILLMAN, J L**; LAL, P; REDDY, R; **TANG, Y T**; YUE, H
PATENT ASSIGNEE(S): (INCY-N) INCYTE PHARM INC
COUNTRY COUNT: 85
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000012711	A2	20000309	(200022)*	EN	140

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC
MW NL OA PT SD SE SL SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI
GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI
SK SL TJ TM TR TT UA UG US UZ VN YU ZW
AU 9961376 A 20000321 (200031)
EP 1117781 A2 20010725 (200143) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK
NL PT RO SE SI
JP 2003520565 W 20030708 (200347) 176

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000012711	A2	WO 1999-US20468	19990902
AU 9961376	A	AU 1999-61376	19990902
EP 1117781	A2	EP 1999-948140	19990902
		WO 1999-US20468	19990902
JP 2003520565	W	WO 1999-US20468	19990902
		JP 2000-567698	19990902

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9961376	A	Based on	WO 2000012711
EP 1117781	A2	Based on	WO 2000012711
JP 2003520565	W	Based on	WO 2000012711

PRIORITY APPLN. INFO: US 1999-155263P 19990210; US 1998-155226P 19980902; US 1998-191283 19981112; US 1998-155225P 19981209; US 1999-155211P 19990126

AN 2000-256643 [22] WPIDS

AB WO 200012711 A UPAB: 20030723

NOVELTY - An isolated human membrane channel protein (MECHP) (I) comprising a 724, 257, 377, 491, 341, 476, 266, 182, 942, 519, 251, 323, 51, 235, 234 or 301 residue amino acid sequence, all fully defined in the specification, and its fragments, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a variant with at least 95% amino acid sequence identity to (I);

(2) an isolated and purified polynucleotide (II) encoding (I), or its polynucleotide variant with at least 95% sequence identity;

(3) an isolated and purified polynucleotide (IIa) complementary to (II);

(4) detecting a polynucleotide in a sample by hybridizing (IIa) to it and detecting the hybridization complex formed, the presence of the complex indicates the presence of the polynucleotide in the sample;

(5) an isolated and purified polynucleotide comprising a 2994, 1298, 1877, 2517, 1154, 1879, 1537, 884, 3156, 1774, 1505, 1478, 1971, 1424, 1224, 1300, 1060 or 1815 nucleotide sequence, all fully defined in the specification, or fragments of them;

(6) a variant with at least 95% identity to the polynucleotide of (5);

(7) an isolated and purified polynucleotide complementary to the sequence of (5);

(8) an expression vector (III) comprising at least a fragment of (II);

(9) a host cell (IV) comprising (III);

(10) production of (I), comprising culturing (IV) under expression conditions and recovering the polypeptide from the culture;

(11) a pharmaceutical composition (P) comprising (I), and a carrier;

(12) a purified antibody specifically binding to (I); and

(13) a purified agonist and antagonist of (I).

ACTIVITY - Antiarteriosclerotic; hepatotropic; cytostatic; anti-HIV; antianemic; neuroprotective; immunomodulator; antidiabetic; cardiant; hypotensive; vasotropic; antiasthmatic; nootropic; antiinflammatory; anticonvulsant; thrombolytic; antiParkinsonian; antidepressant; immunestimulant.

MECHANISM OF ACTION - Acts as aquaporins, Gap junction proteins and ion channel proteins; protein transporter. Aquaporin activity of MECHP was demonstrated by its ability to induce osmotic water permeability in Xenopus laevis oocytes injected with MECHP cRNA. Oocytes injected with water were used as the control. Injected oocytes were given hypotonic shock by transferring from 200 mosM to 70 mosM modified Barth's buffer. An increase in osmotic volume of oocytes was observed at 24 deg. C which was found to be proportional to MECHP aquaporin activity in the injected oocytes.

USE - (P) is useful for diagnosing, treating and preventing disorders associated with decreased expression or activity of MECHP (claimed). Antagonist of (I) is useful for diagnosing, treating and preventing the disorders associated with increased expression and activity of MECHP (claimed). MECHP, its fragment, derivatives and (II) are also useful for diagnosing, preventing and treating disorders associated with decreased expression or activity of MECHP such as cell proliferative disorders e.g. actinic keratosis, arteriosclerosis, atherosclerosis, bursitis; cancers e.g. lymphoma, melanoma, sarcoma, teratocarcinoma; immune/inflammatory disorders e.g. AIDS, addison's disease, adult respiratory distress syndrome (ARDS), amyloidosis; transport/secretary disorders e.g. cystic fibrosis, Chediak-Higashi syndrome, diabetes mellitus, diabetes insipidus; osmoregulatory disorders e.g. diarrhea, chronic renal failure, hypothyroidism, metabolic acidosis; muscular disorders e.g. myocarditis, cardiomyopathy, Duchenne's muscular dystrophy, polymyositis; cardiovascular disorders e.g. arteriovenous fistula, hypertension, vasculitis, aneurysms; congenital lung anomalies e.g. atelectasis, pulmonary embolism, vascular sclerosis, chronic bronchitis, lung abscess; neurological disorders e.g. Alzheimer's disease, Parkinson's disease, dementia, Huntington's disease; muscular dystrophies e.g. congenital, distal, myotonia, myasthenia gravis; and seasonal affective disorders. (I) is useful as immunogens and also for screening libraries of compounds, e.g. in drug screening techniques. (II) can be used to generate hybridization probes which can be used to map naturally occurring genomic sequences.

Dwg.0/9

L78 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 6
ACCESSION NUMBER: 1999:795965 HCAPLUS
DOCUMENT NUMBER: 132:31795

TITLE: Sequences of 31 human proteins which regulate gene expression, and uses thereof in the diagnosis and treatment of reproductive disorders, nervous disorders, and cell proliferation disorders

INVENTOR(S): Lal, Preeti; Yue, Henry; **Tang, Y. Tom; Hillman, Jennifer L.; Bandman, Olga; Corley, Neil C.; Guegler, Karl J.; Gorgone, Gina A.; Baughn, Mariah R.**; Patterson, Chandra; Lu, Dyung Aina M.

PATENT ASSIGNEE(S): Incyte Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 149 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9964596	A2	19991216	WO 1999-US13281	19990611
WO 9964596	A3	20000406		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2329685	AA	19991216	CA 1999-2329685	19990611
AU 9944388	A1	19991230	AU 1999-44388	19990611
EP 1086219	A2	20010328	EP 1999-927495	19990611
R: BE, DE, ES, FR, GB, IT, NL				
JP 2002517246	T2	20020618	JP 2000-553586	19990611

PRIORITY APPLN. INFO.:
US 1998-89029P P 19980612
US 1998-94575P P 19980729
US 1998-104624P P 19981014
WO 1999-US13281 W 19990611

AB The invention provides protein and cDNA sequences for 31 human proteins (PRGEs) which regulate gene expression. Said proteins were first identified in human tissue cDNA libraries using a computer search for amino acid sequence alignments; consensus sequences were derived from overlapping and/or extended nucleic acid sequences. The invention also provides expression vectors, host cells, agonists, antibodies and antagonists. The invention also provides for the use of the provided proteins and/or genes in the diagnosis, treatment, and prevention of reproductive disorders, nervous disorders, and diseases associated with cell proliferation and differentiation.

L78 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 7
ACCESSION NUMBER: 1999:764066 HCAPLUS
DOCUMENT NUMBER: 132:20805
TITLE: Human transmembrane proteins and polynucleotides encoding them for diagnostic and therapeutic use

INVENTOR(S): **Tang, Y. Tom**; Lal, Preeti; **Hillman, Jennifer L.**; Yue, Henry; **Guegler, Karl J.**; **Corley, Neil C.**; **Bandman, Olga**; Patterson, Chandra; **Gorgone, Gina A.**; Kaser, Matthew R.; **Baughn, Mariah R.**; Au-Yong, Janice

PATENT ASSIGNEE(S): Incyte Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 229 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9961471	A2	19991202	WO 1999-US11904	19990528
WO 9961471	A3	20000316		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2329072	AA	19991202	CA 1999-2329072	19990528
AU 9944090	A1	19991213	AU 1999-44090	19990528
EP 1080194	A2	20010307	EP 1999-927108	19990528
R: BE, DE, ES, FR, GB, IT, NL				
JP 2002516082	T2	20020604	JP 2000-550875	19990528

PRIORITY APPLN. INFO.:

US 1998-87260P	P	19980529
US 1998-91674P	P	19980702
US 1998-102954P	P	19981002
US 1998-109869P	P	19981124
WO 1999-US11904	W	19990528

AB The invention provides human transmembrane proteins (HTMPN) and polynucleotides which identify and encode HTMPN. The invention also provides expression vectors, host cells, antibodies, agonists, and antagonists. The invention also provides methods for diagnosing, treating, or preventing disorders associated with expression of HTMPN.

FILE 'HOME' ENTERED AT 12:40:12 ON 16 DEC 2003

FILE 'HCAPLUS' ENTERED AT 12:58:48 ON 16 DEC 2003
L79 0 S ORP(S)(OXIDOREDUCTASE OR OXIDO REDUCTASE) -key terms

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 13:00:18 ON 16 DEC 2003
L80 1 S L79
L81 0 S L80 NOT L58

FILE 'USPATFULL' ENTERED AT 13:01:02 ON 16 DEC 2003
L82 3 S L79
L83 3 S L82(S)HUMAN
L84 2 S L83 NOT L61

L84 ANSWER 1 OF 2 USPATFULL on STN
ACCESSION NUMBER: 2002:291078 USPATFULL
TITLE: Polynucleotides and polypeptides derived from corn ear
INVENTOR(S): Lalgudi, Raghunath V., Clayton, MO, United States
Ito, Laura Y., Pleasanton, CA, United States
Sherman, Bradley K., Oakland, CA, United States
PATENT ASSIGNEE(S): Incyte Genomics, Inc., Palo Alto, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6476212	B1	20021105
APPLICATION INFO.:	US 1999-313294		19990514 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-86722P	19980526 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Brusca, John S.
ASSISTANT EXAMINER: Moran, Marjorie A.
LEGAL REPRESENTATIVE: Incyte Genomics, Inc., Murry, Lynn E.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 23084
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides purified, corn ear-derived polynucleotides (cdps) which encode corn ear-derived polypeptides (CDPs). The invention also provides for the use of cdps or their complements, oligonucleotides, or fragments in methods for determining altered gene expression, to recover regulatory elements, and to follow inheritance of desirable characteristics through hybrid breeding programs. The invention further provides for vectors and host cells containing cdps for the expression of CDPs. The invention additionally provides for (i) use of isolated and purified CDPs to induce antibodies and to screen libraries of compounds and (ii) use of anti-CDP antibodies in diagnostic assays.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 536/023.600
INCLS: 536/024.300; 435/006.000
NCL NCLM: 536/023.600

NCLS: 435/006.000; 536/024.300

L84 ANSWER 2 OF 2 USPATFULL on STN
ACCESSION NUMBER: 2002:16850 USPATFULL
TITLE: Human stress array
INVENTOR(S): Chenchik, Alex, Palo Alto, CA, UNITED STATES
Lukashev, Matvey E., Newton, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002009730	A1	20020124
APPLICATION INFO.:	US 2001-782909	A1	20010213 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-441920, filed on 17 Nov 1999, UNKNOWN
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Bret E. Field, BOZICEVIC, FIELD & FRANCIS LLP, 200 Middlefield Road, Suite 200, Menlo Park, CA, 94025
NUMBER OF CLAIMS: 36
EXEMPLARY CLAIM: 1
LINE COUNT: 2377
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Human stress arrays and methods for their use are provided. The subject arrays include a plurality of polynucleotide spots, each of which is made up of a polynucleotide probe composition of unique polynucleotides corresponding to a human stress gene. The subject arrays find use in hybridization assays, particularly in assays for the identification of differential gene expression of human stress genes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/006.000
INCLS: 536/024.300
NCL NCLM: 435/006.000
NCLS: 536/024.300

(FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, USPATFULL' ENTERED AT 13:01:54 ON 16 DEC 2003)
L85 2 S (L70 OR L71 OR L72 OR L73 OR L74 OR L75) AND ORP - Author(s)
L86 0 S L85 NOT L77

(FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 13:06:00 ON 16 DEC 2003)
L87 1596 S "LAL P"?/AU
L88 3 S L87 AND (L57 OR ORP)
L89 0 S L88 NOT L77

FILE 'HOME' ENTERED AT 13:08:02 ON 16 DEC 2003